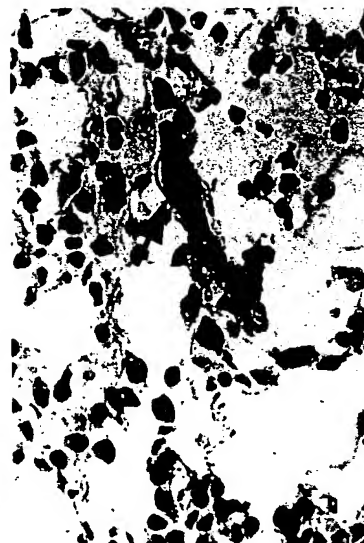
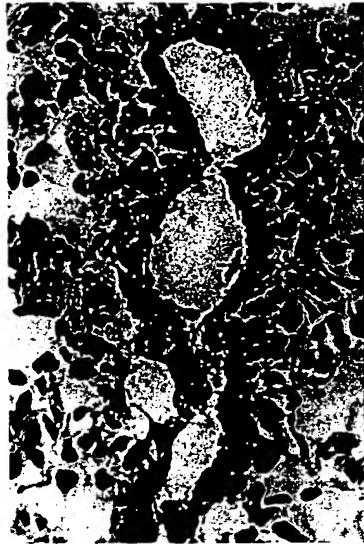


L540

3LL

B16

PS



cardiolipin

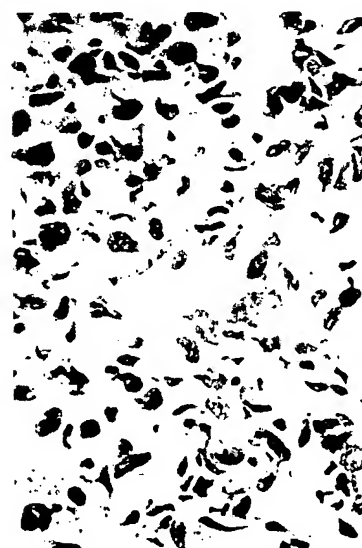
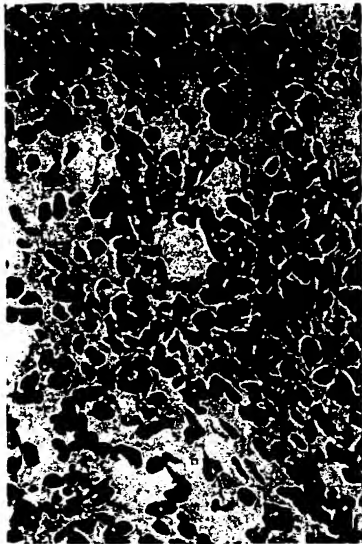


FIG. 1

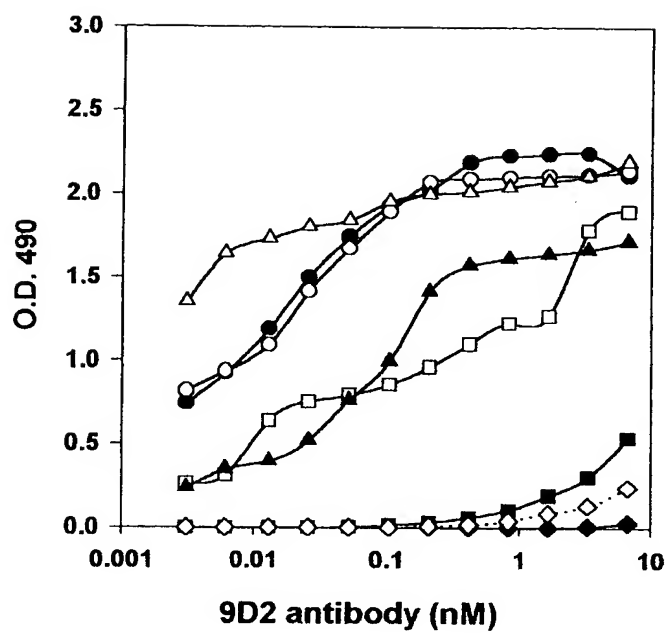


FIG. 2A

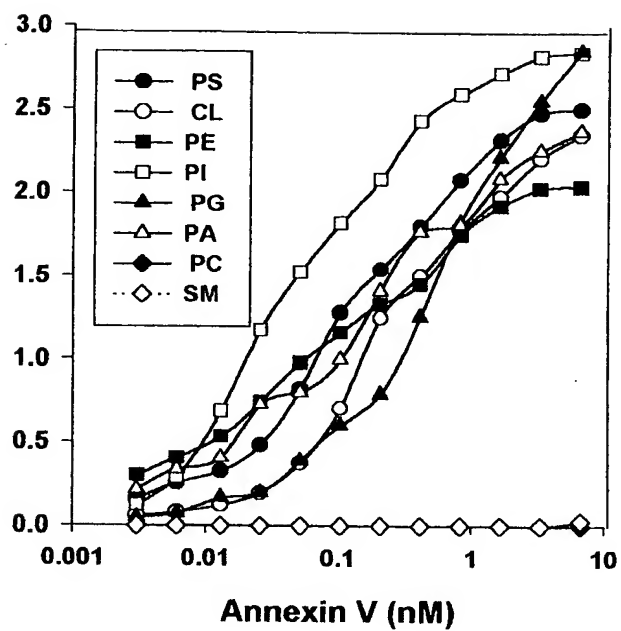


FIG. 2B

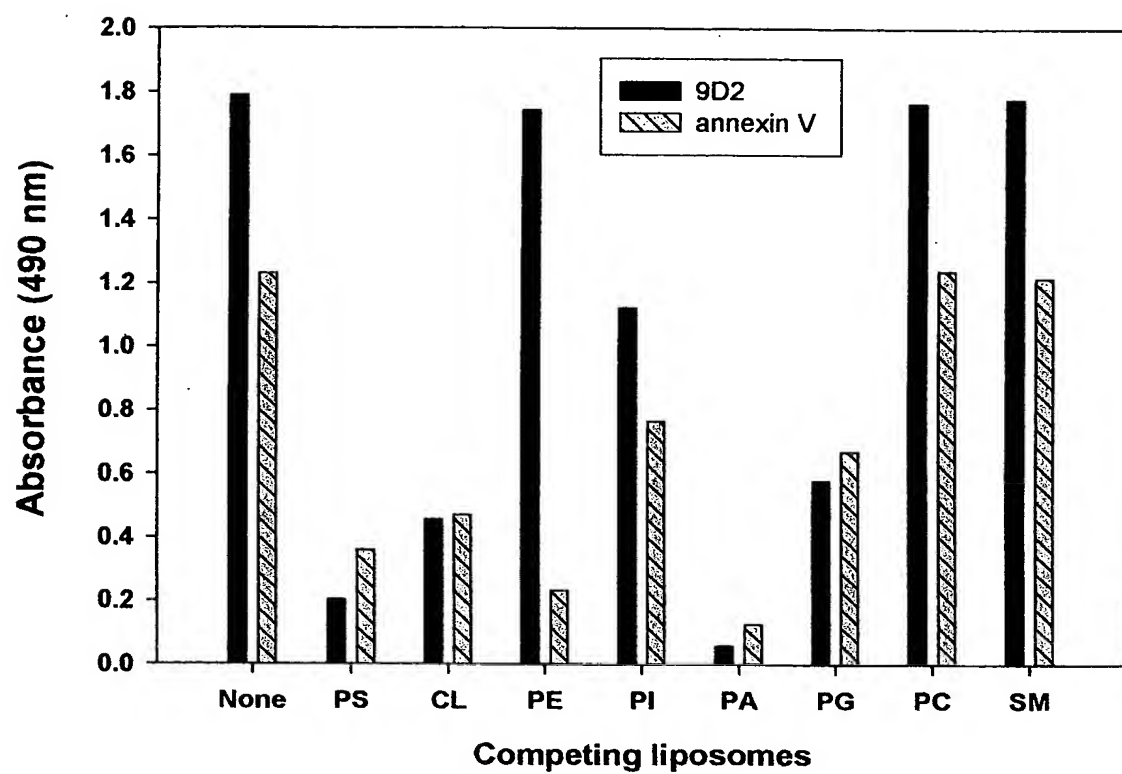


FIG. 3

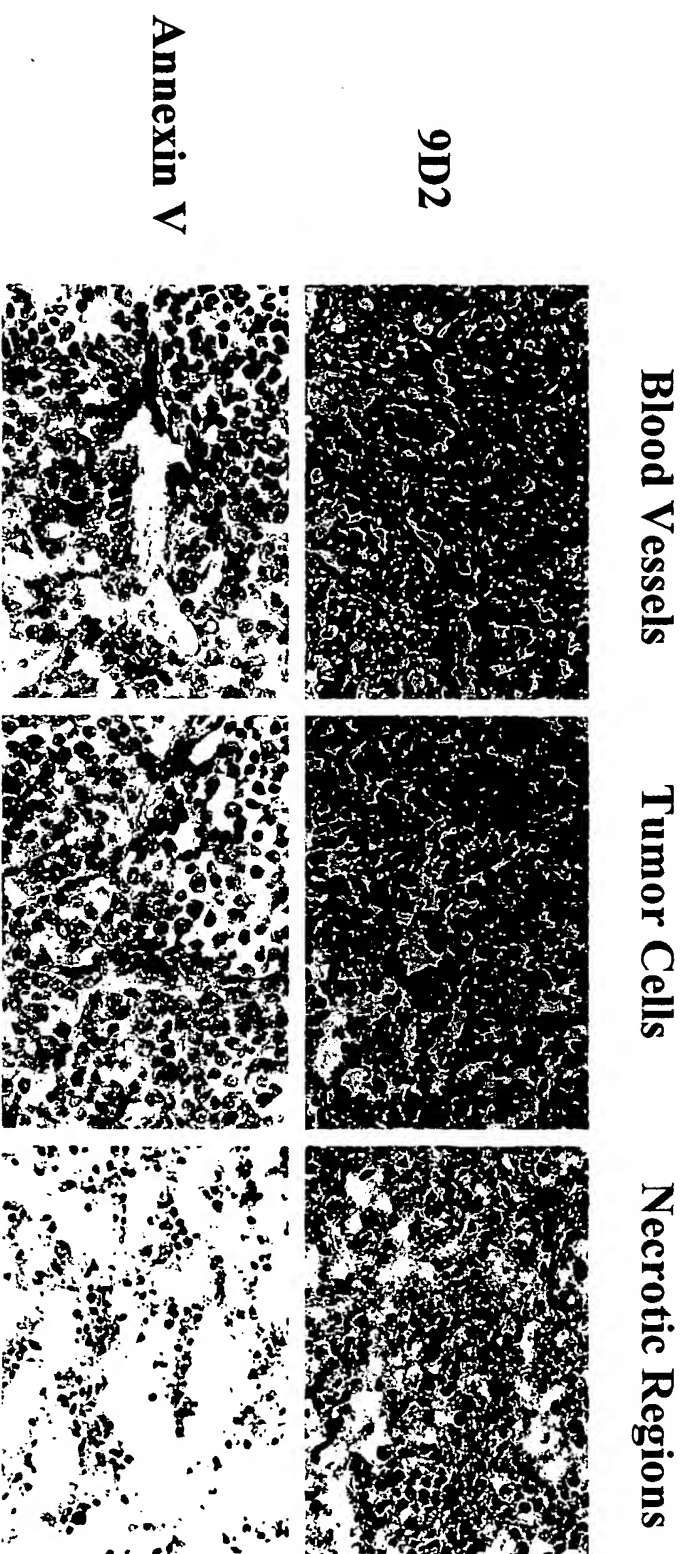


FIG. 4

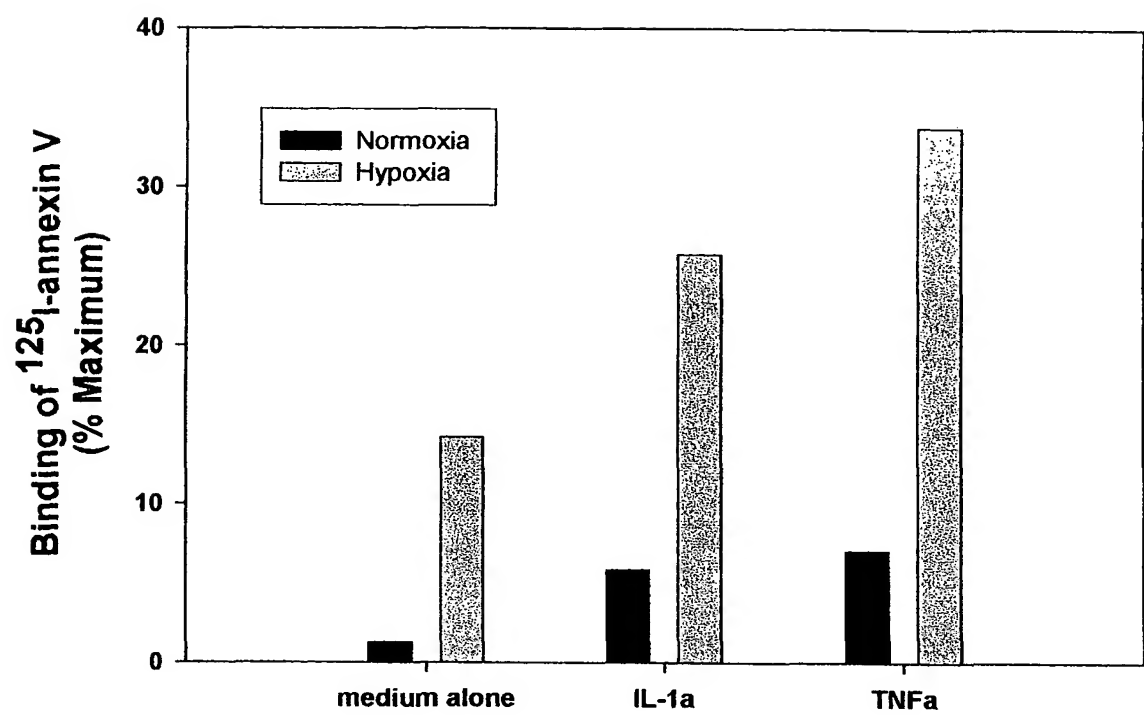


FIG. 5

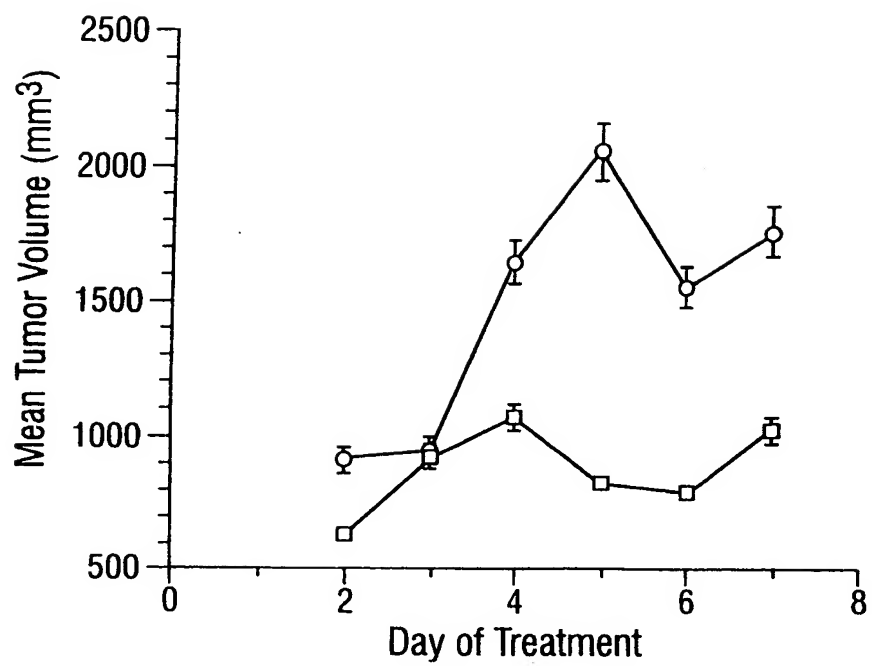


FIG. 6A

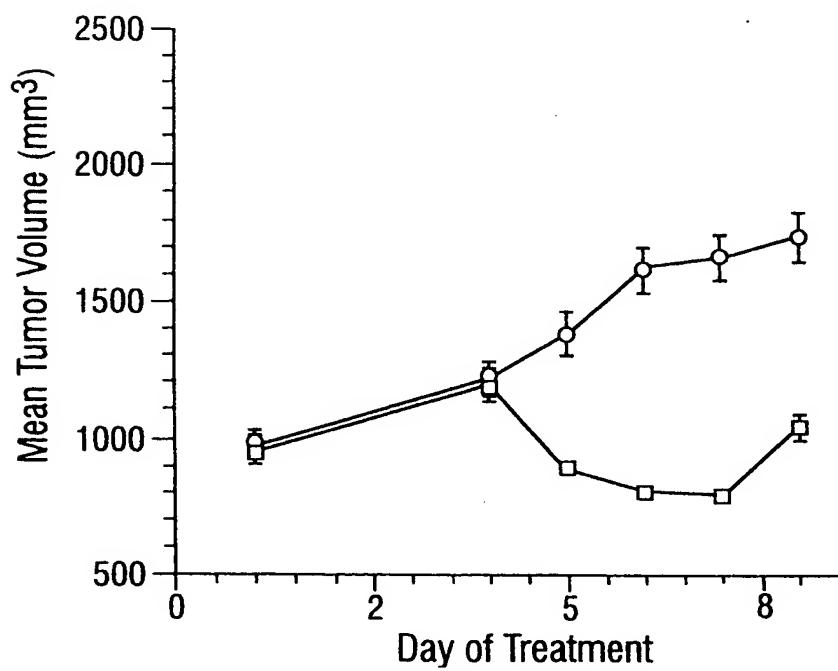


FIG. 6B

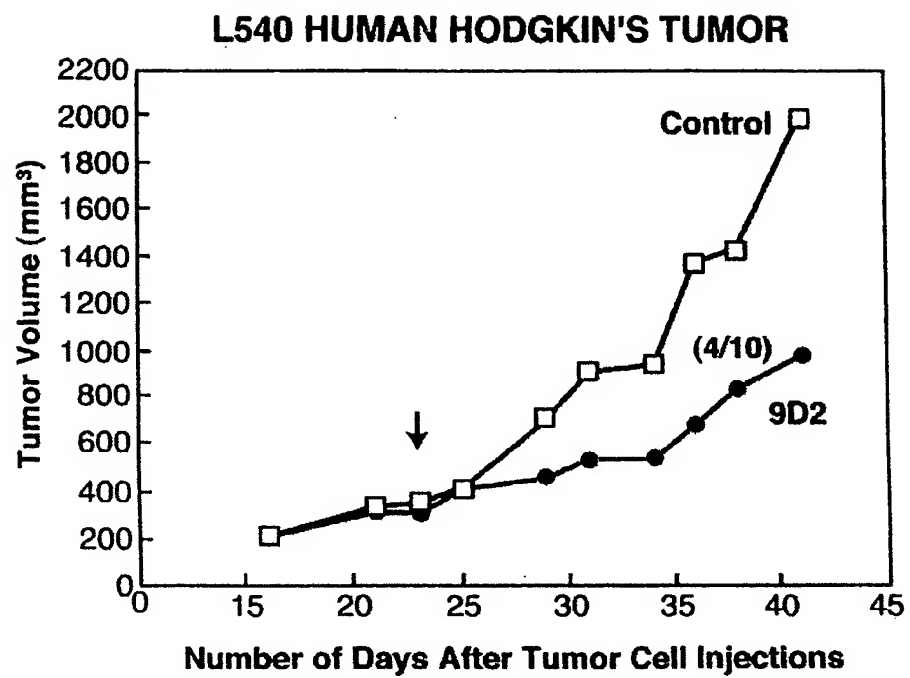


FIG. 7

SYNGENEIC METH A TUMORS

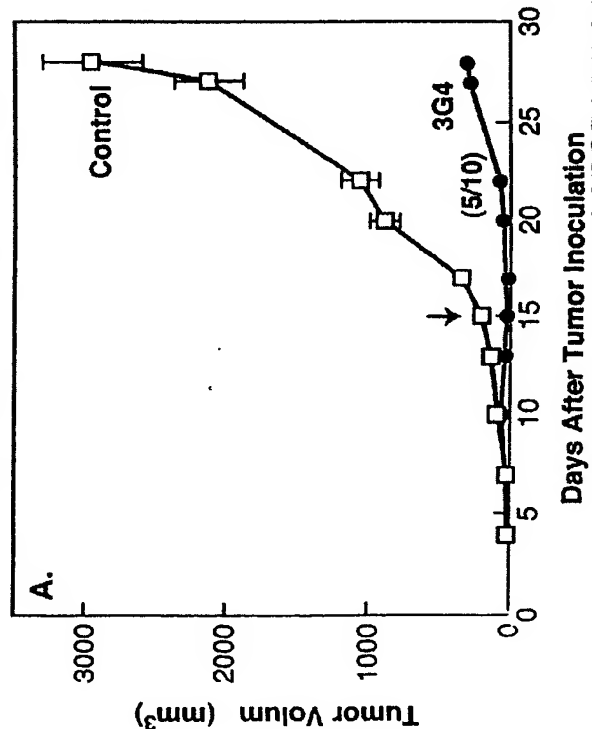


FIG. 8A

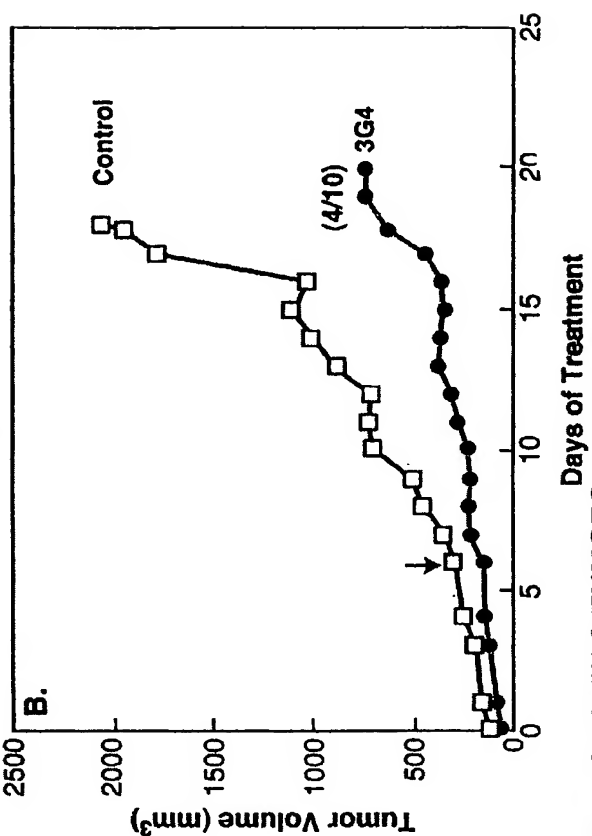


FIG. 8B

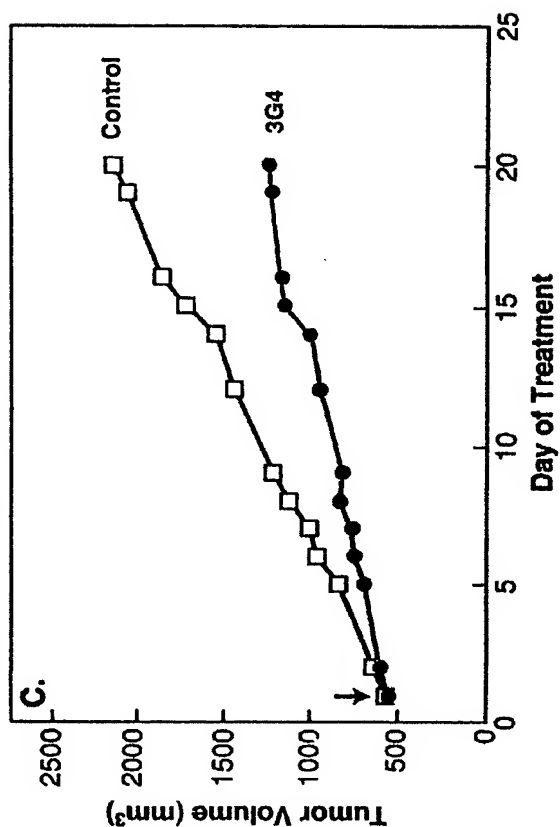


FIG. 8C

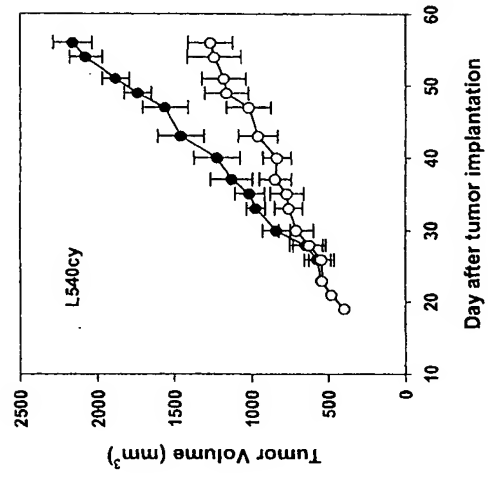


FIG. 8D

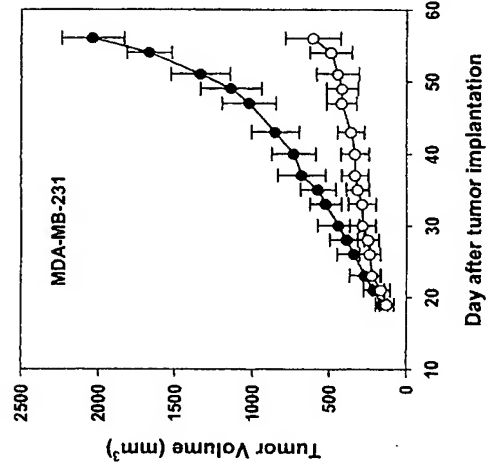


FIG. 8E

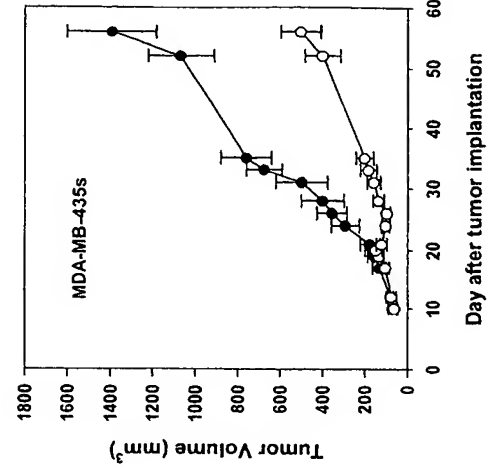


FIG. 8F

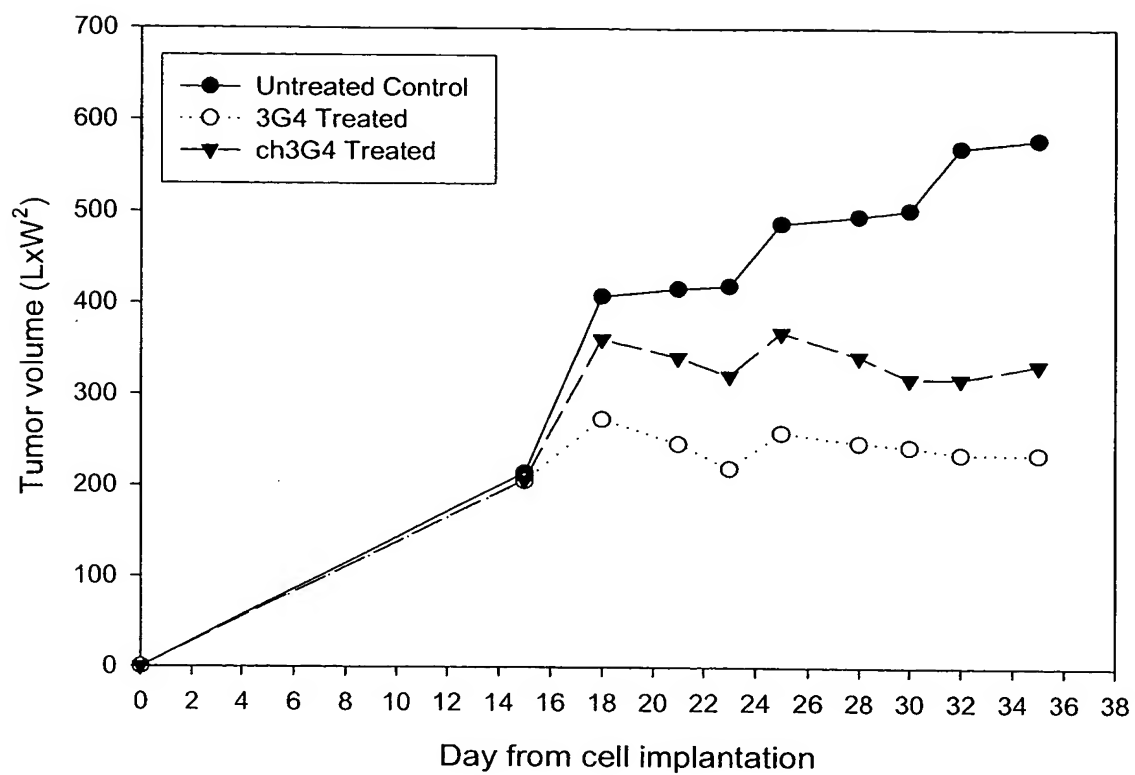
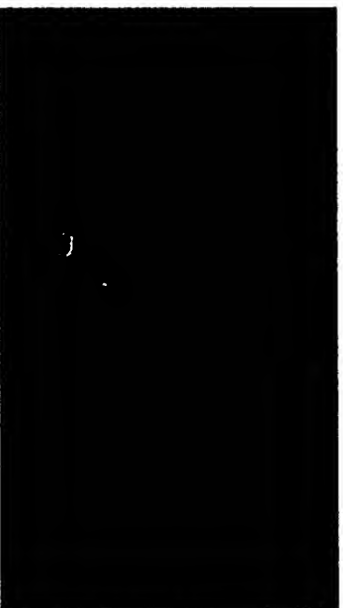
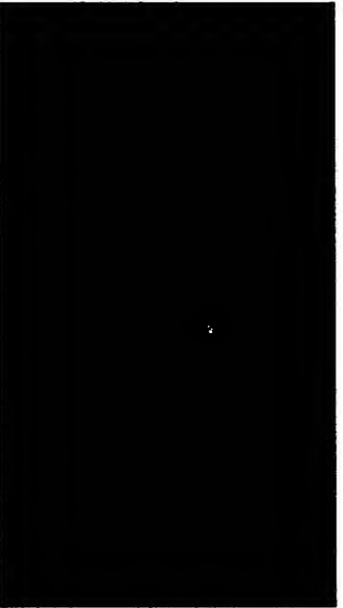


FIG. 8G

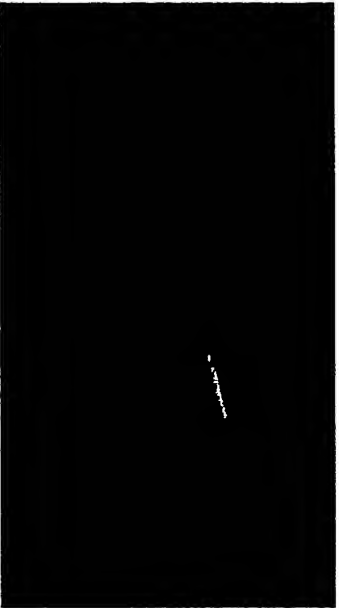
Day 3

Day 9

3G4



GV39G



Untreated

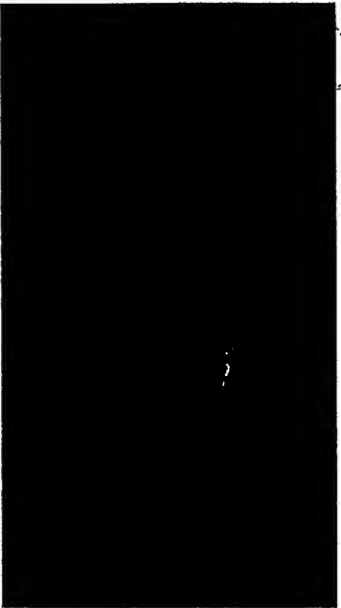


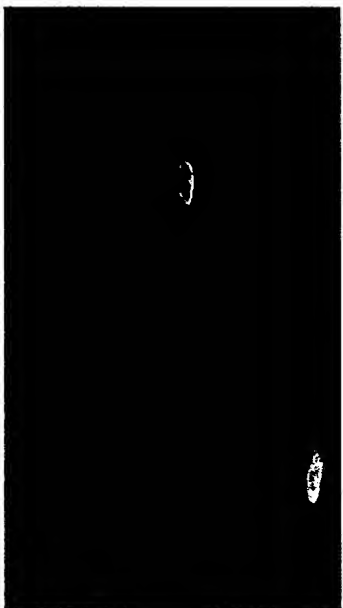
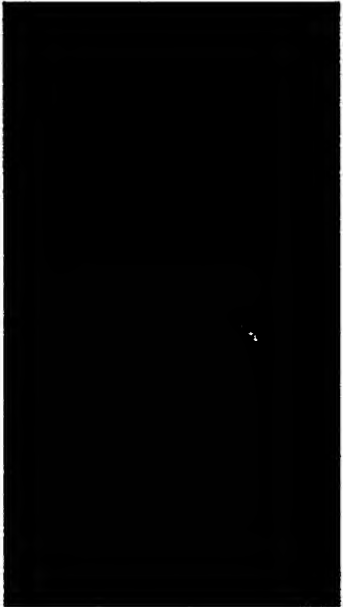
FIG. 9A

BEST AVAILABLE COPY

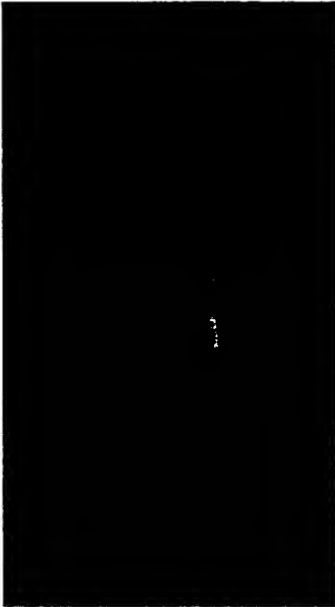
Day 3

Day 9

3G4



GV39G



Untreated

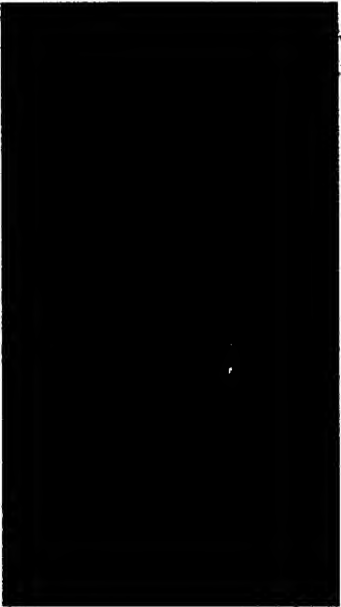


FIG. 9B

BEST AVAILABLE COPY

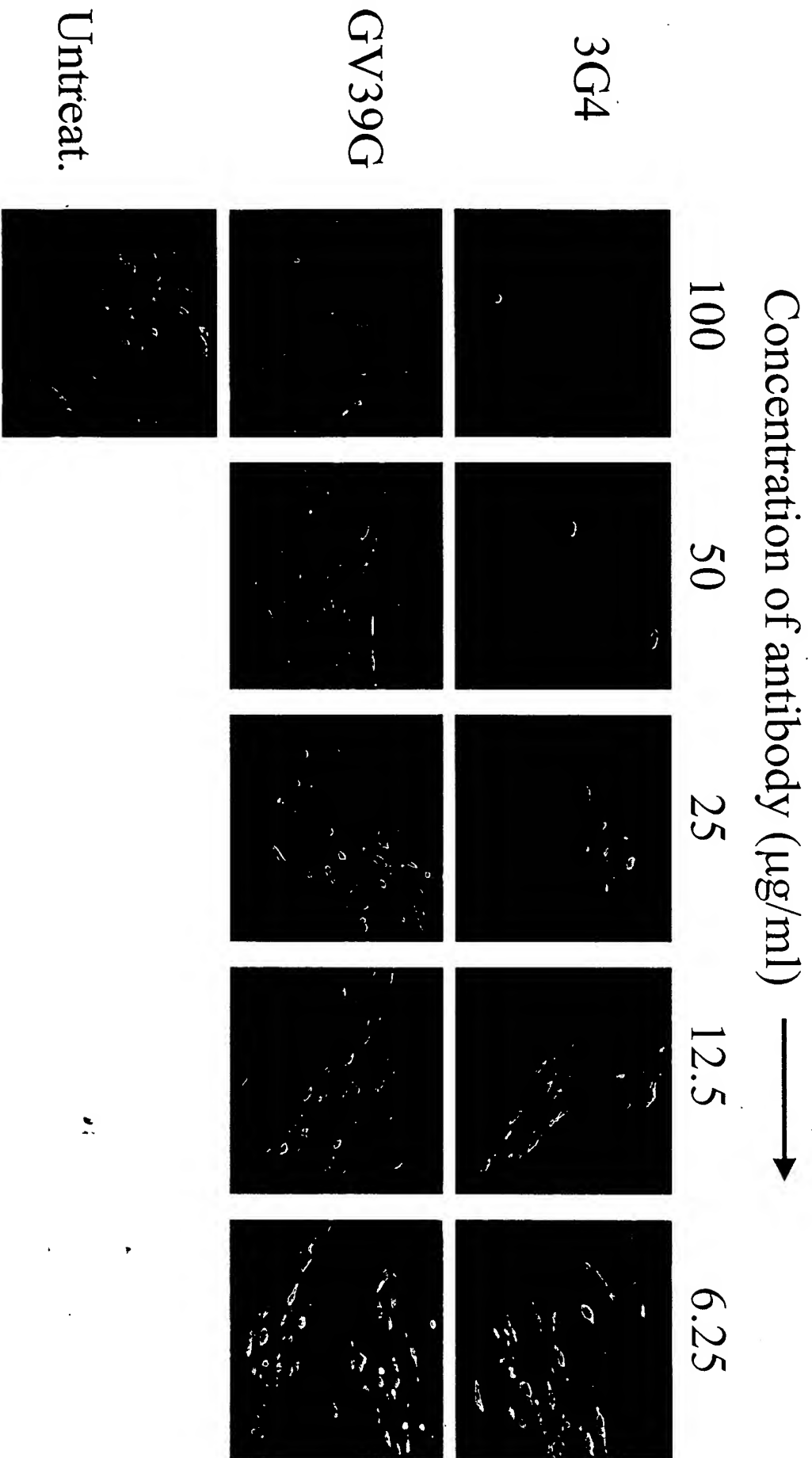


FIG. 10

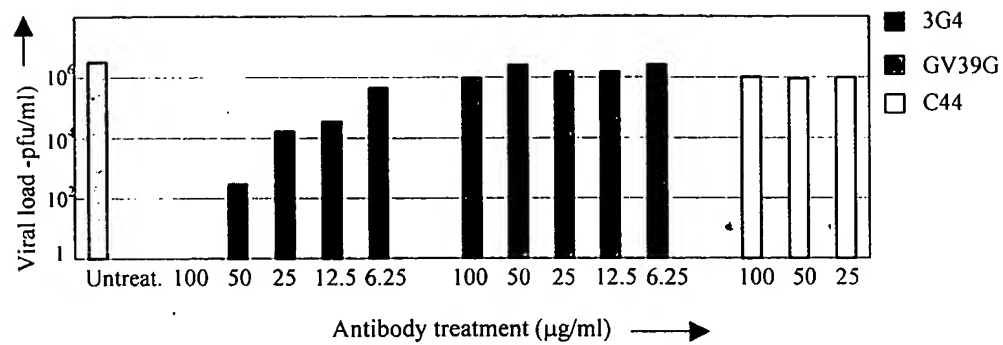


FIG. 11A

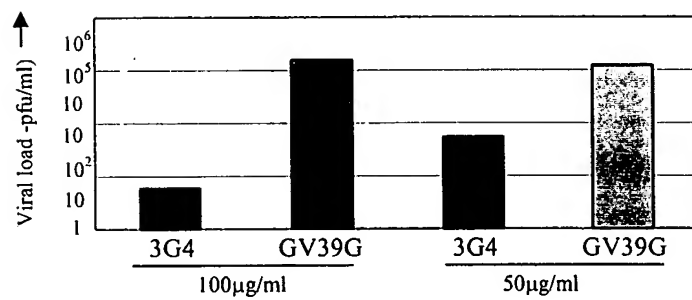


FIG. 11B

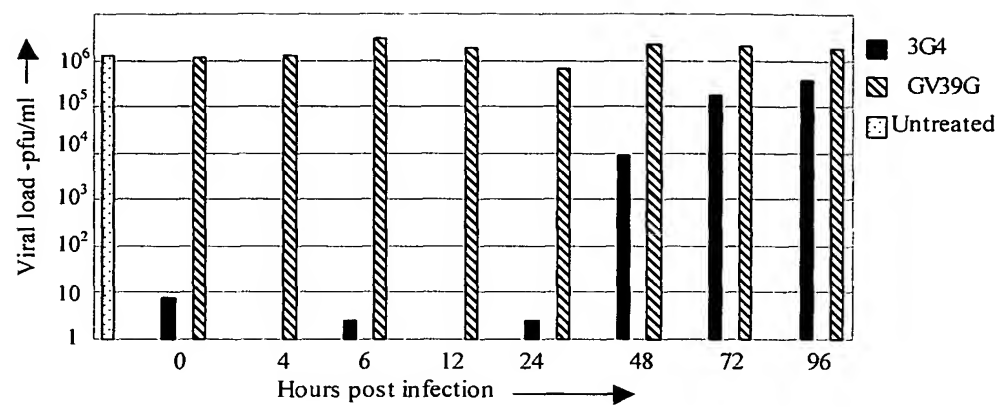


FIG. 11C

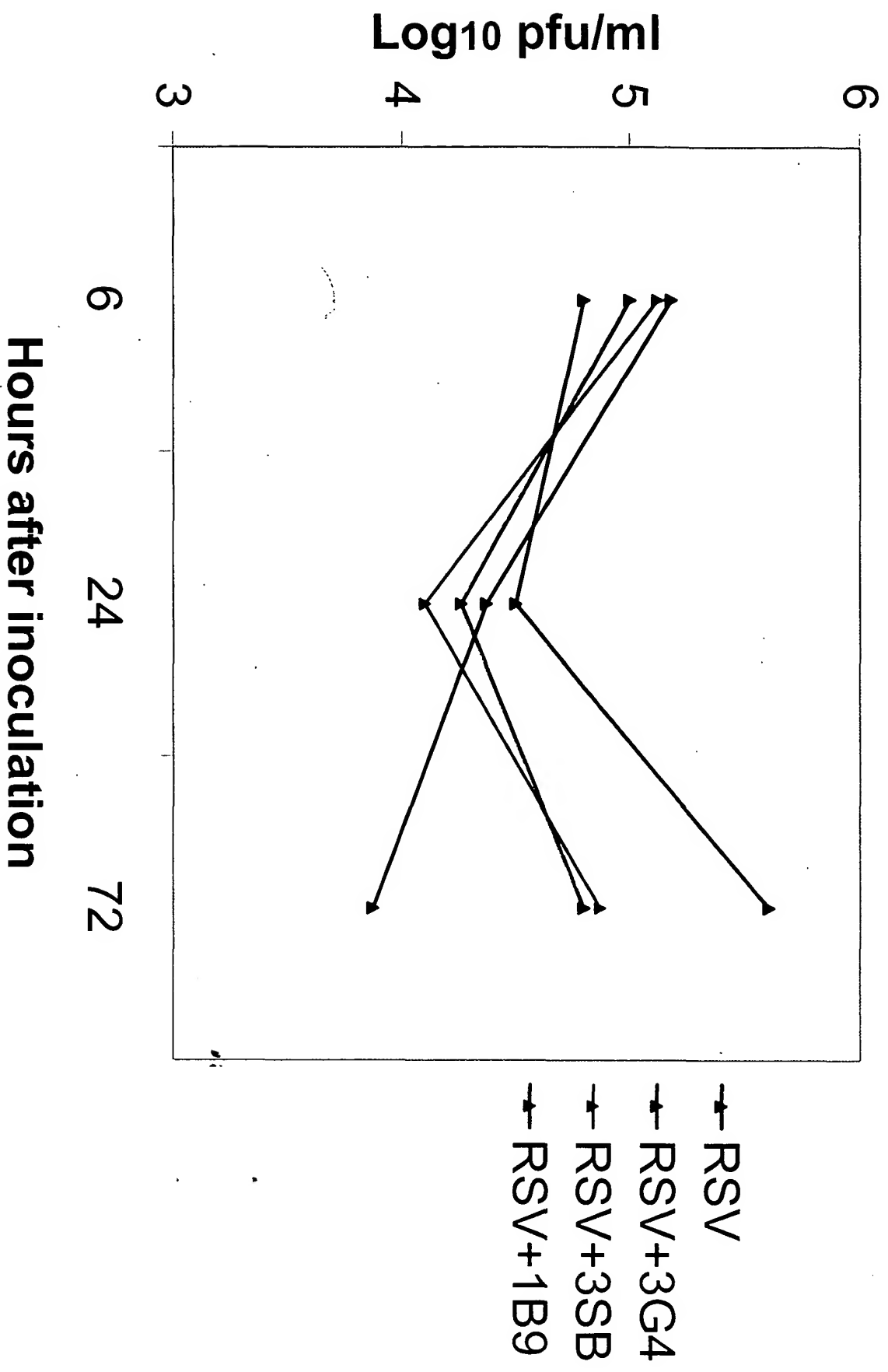


FIG. 12

FIG. 13A. DLB

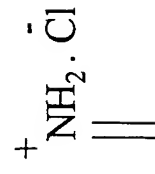


FIG. 13B. DIB

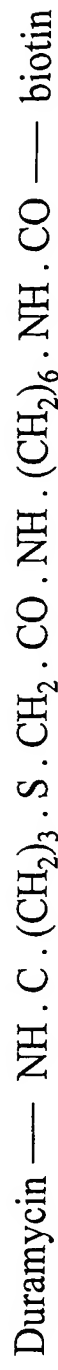
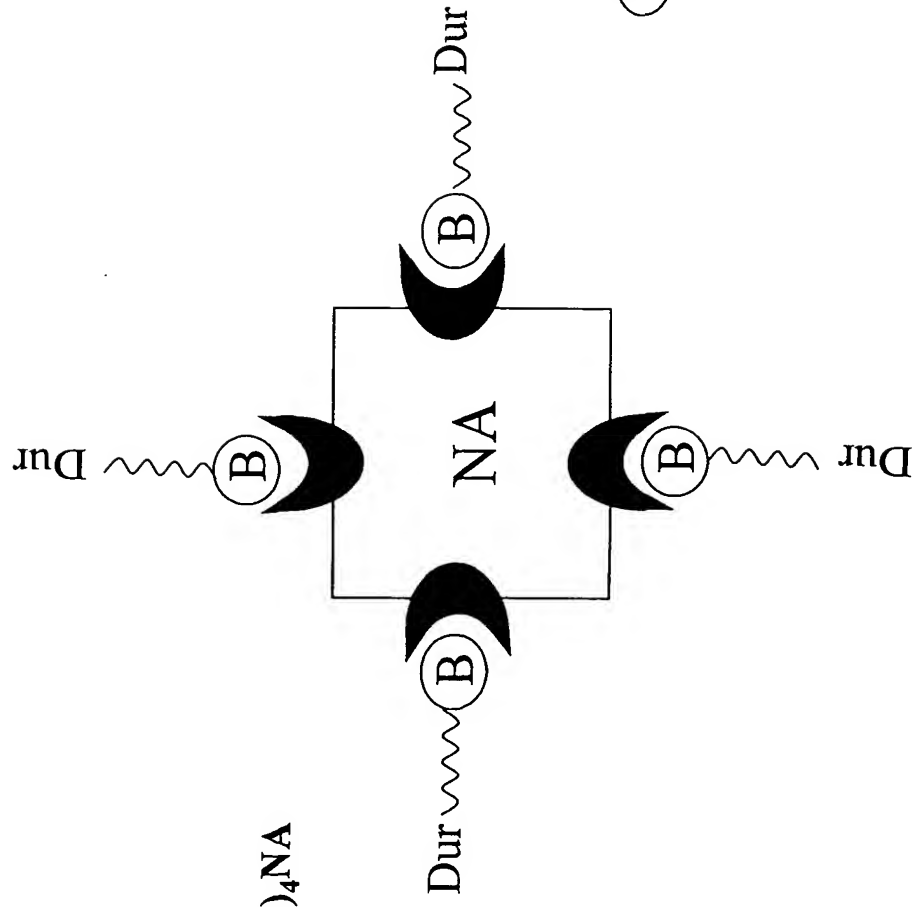


FIG. 13C. (DLB)₄NA



NA = neutravidin

(B) = biotin

Dur = Duramycin

Dur ~~~~~ (B) = DLB

FIG. 13D. (DLB)₄NA-F

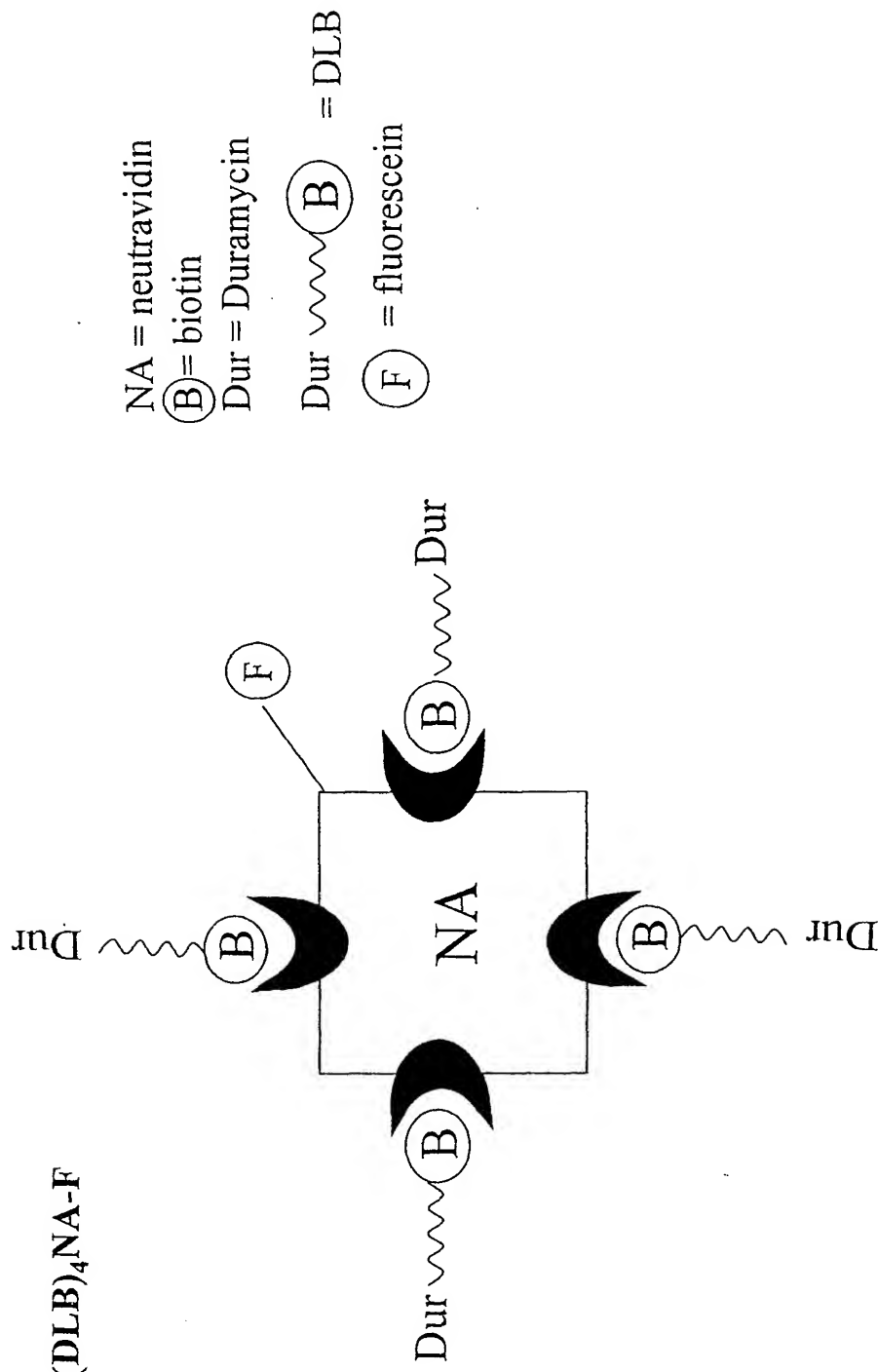
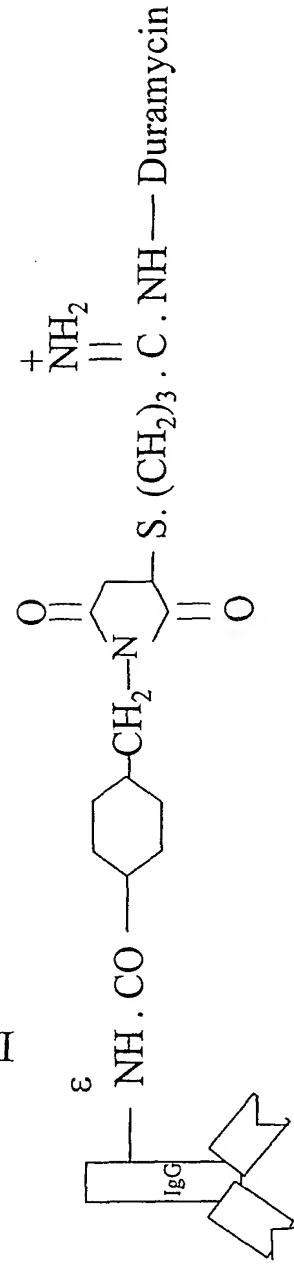
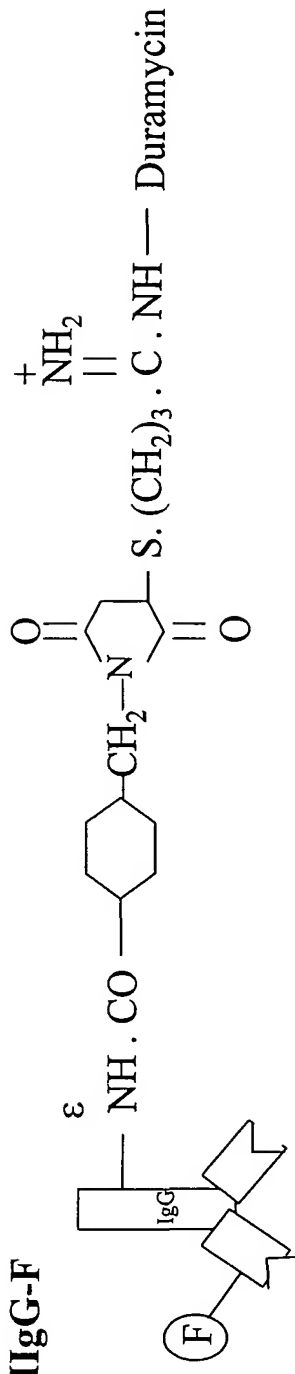


FIG. 13E. (DIM)_n HIgG



n = 5 to 8 Duramycin residues per IgG
 Monomer (150,000 Da) is shown

FIG. 13F. (DIM)_n HIgG-F

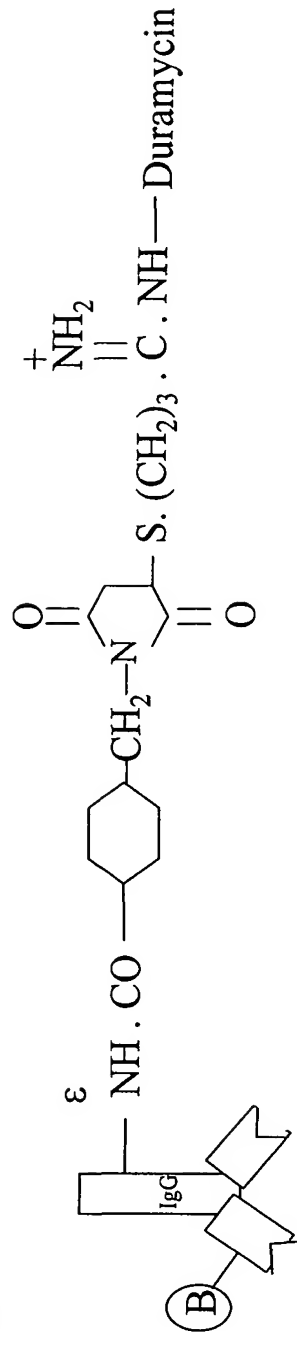


n = 5 to 8 Duramycin residues per IgG

(F) = fluorescein

Monomer (150,000 Da) is shown

FIG. 13G. (DIM)_n HIgG-B



n = 5 to 8 Duramycin residues per IgG

(B) = biotin

Monomer (150,000 Da) is shown

FIG. 13H. (DIB)₄NA

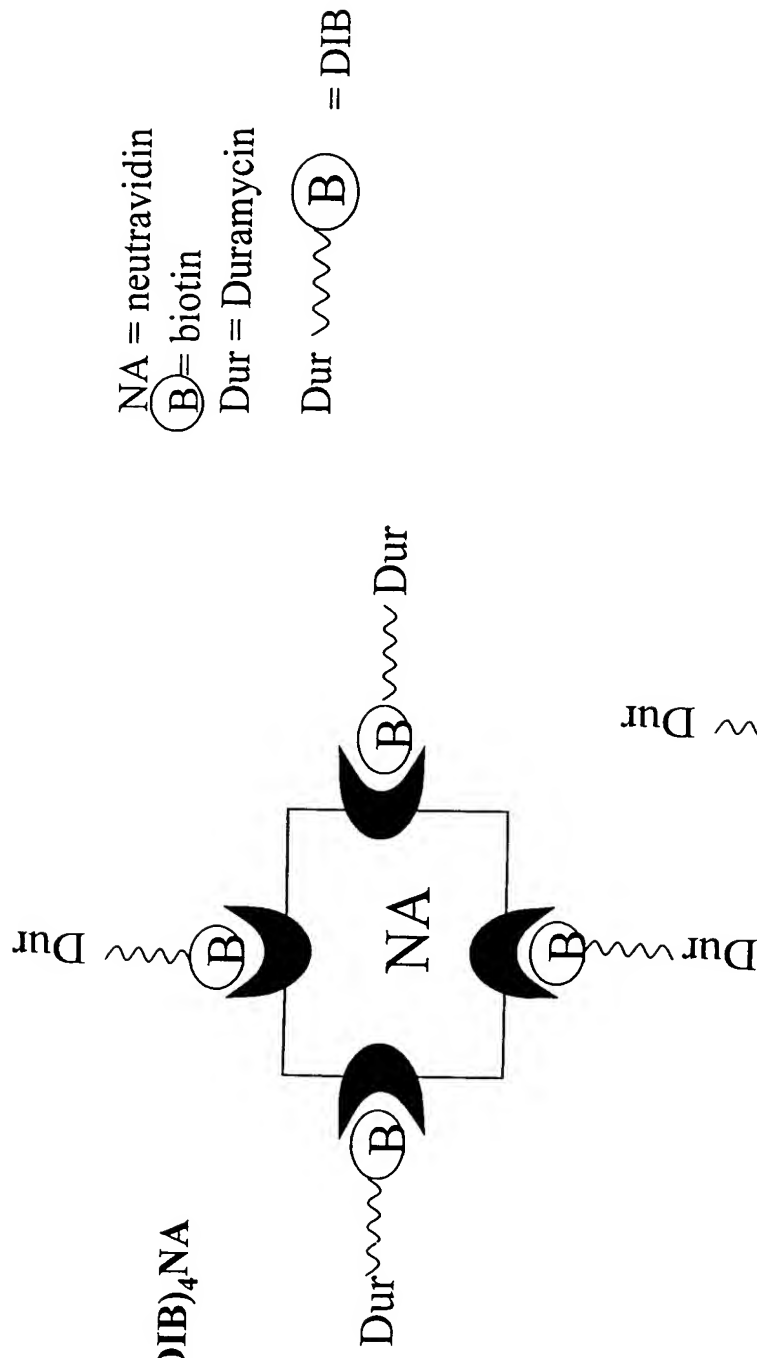
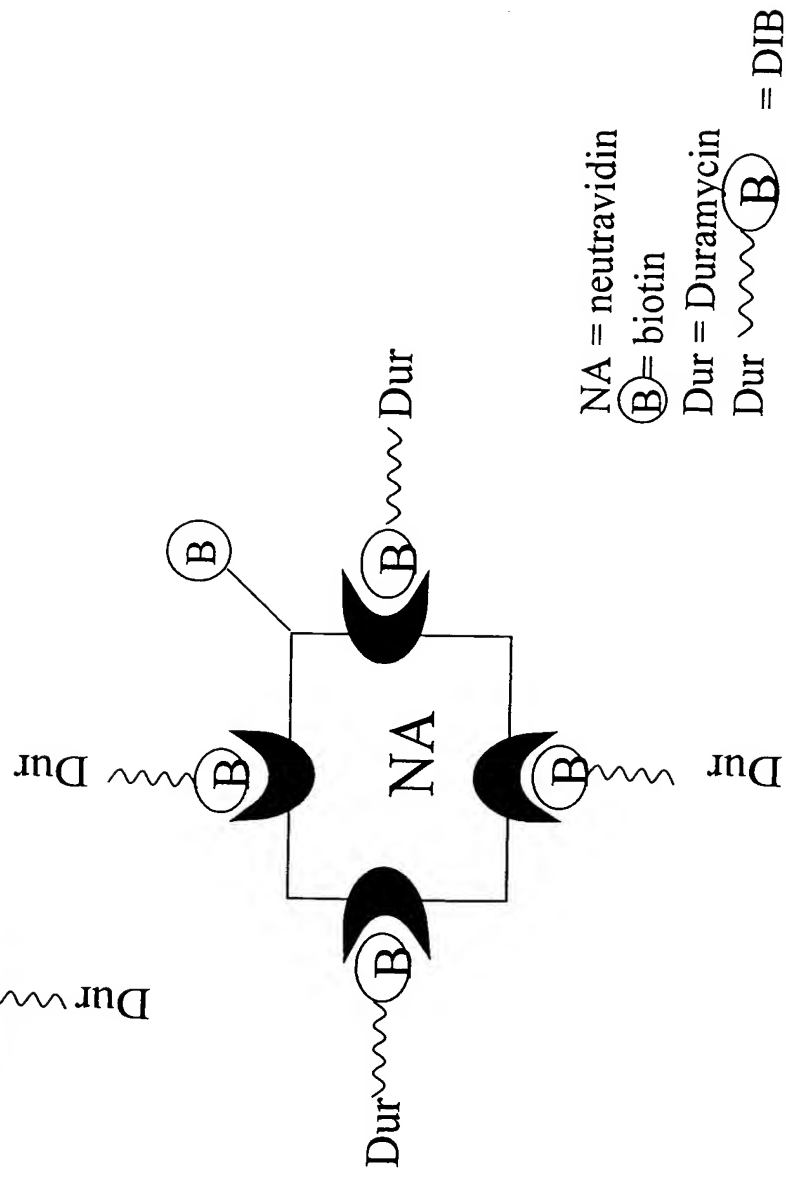


FIG. 13I. (DIB)₄NA-B



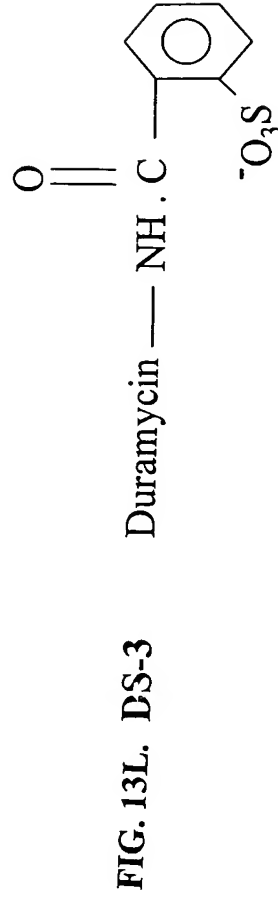
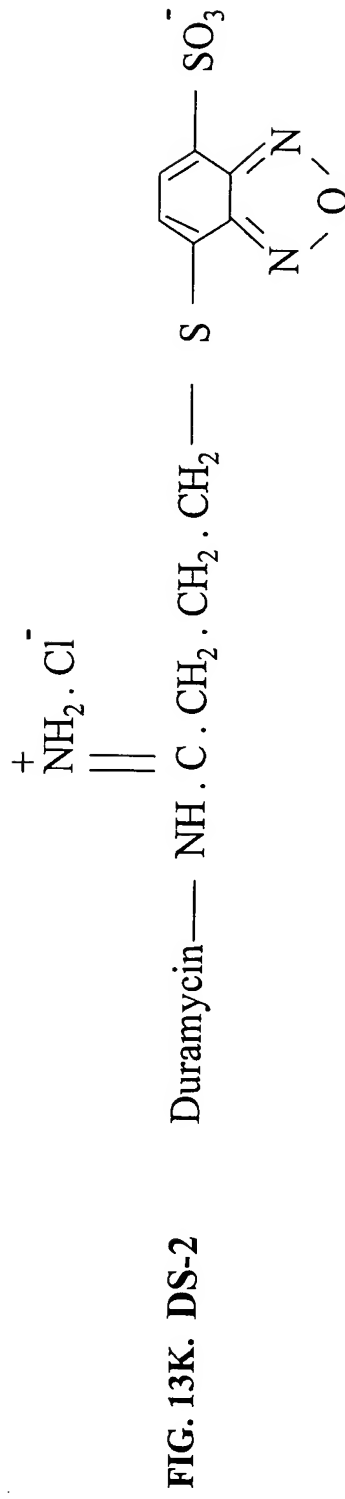
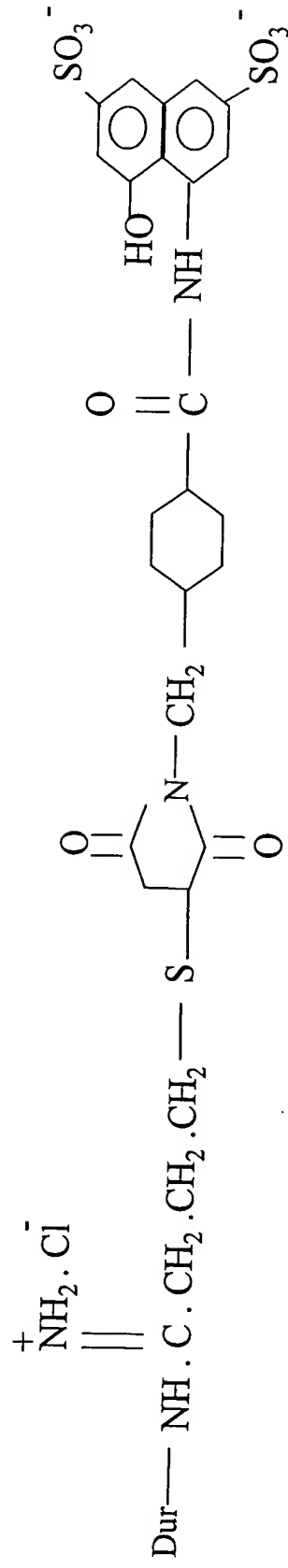
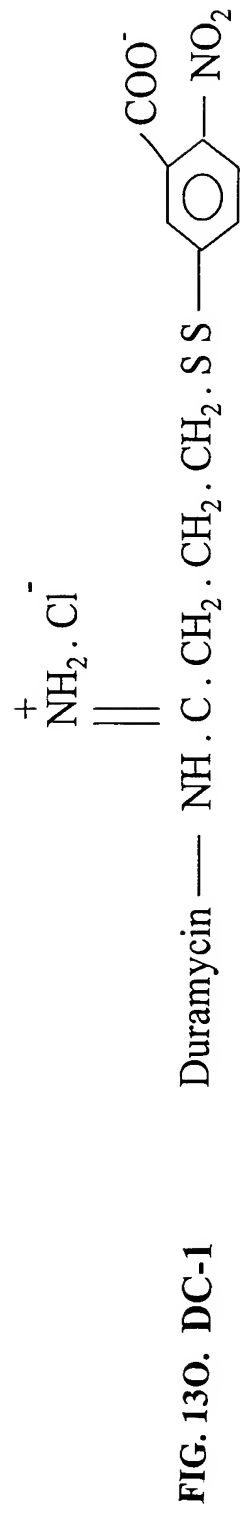


FIG. 13M. DS-4





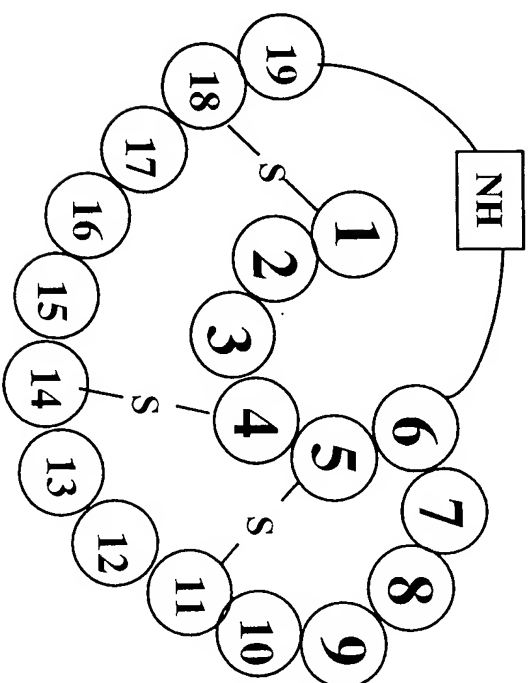
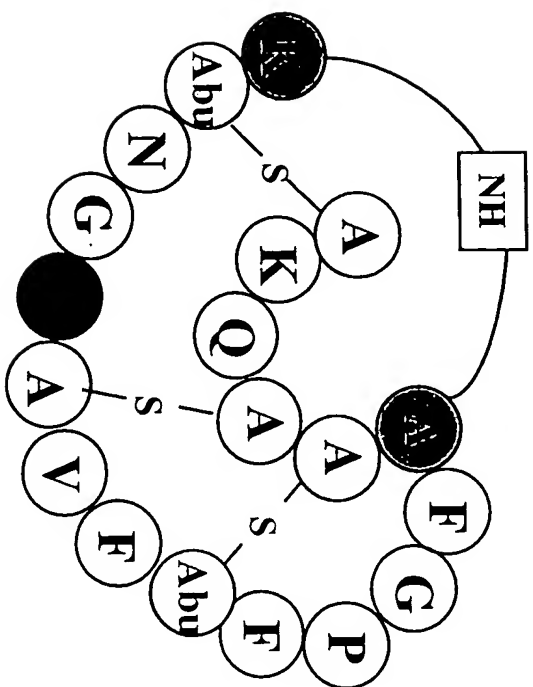
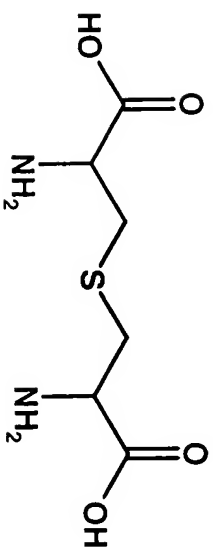
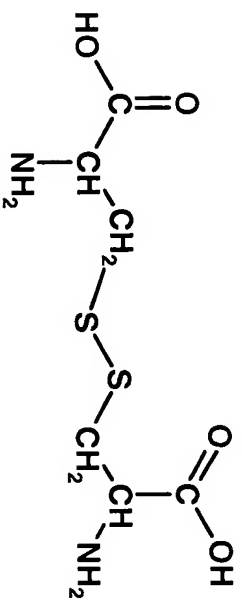


FIG. 13P

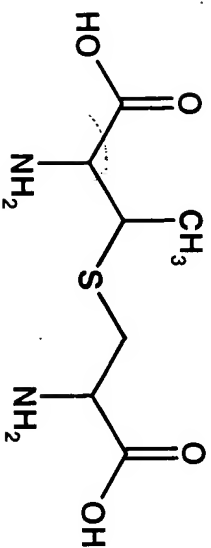


Lanthionine

Ala-S-Ala

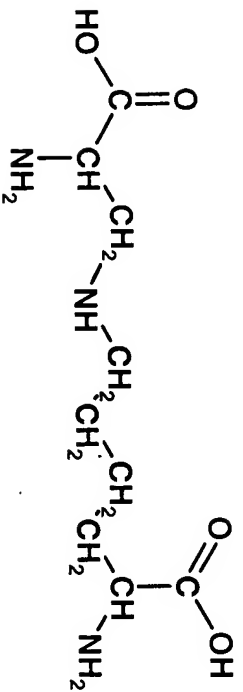


cystine



β-methylanthionine

Abu-S-Ala

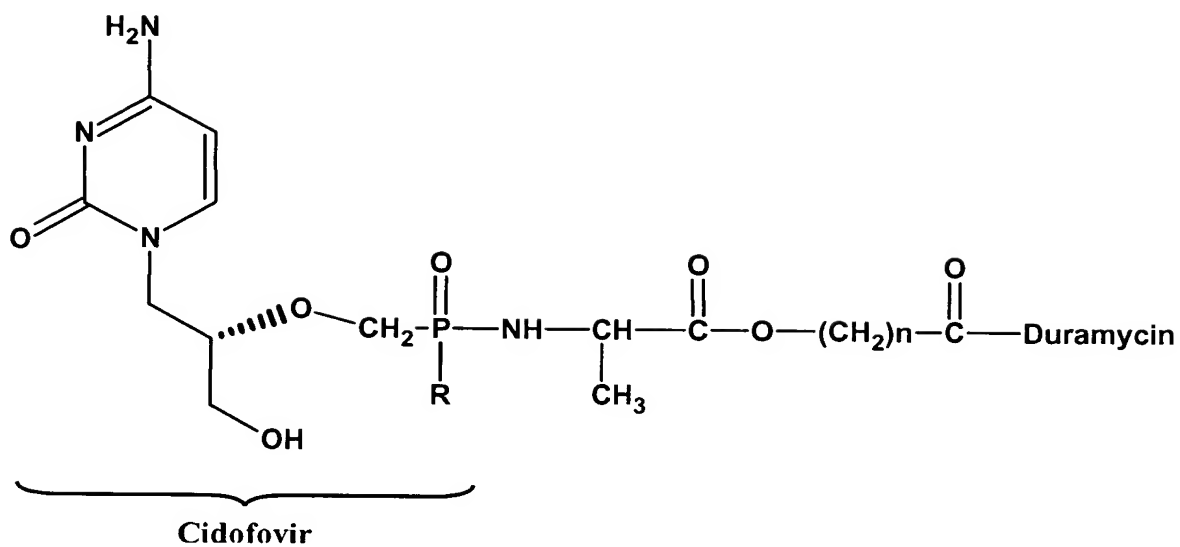


Lysinoalanine

Ala-NH-Lys

FIG. 13Q

FIG. 13R



R= OH, as in cidofovir, or labile hydrophobic group

phospholipids binding profile

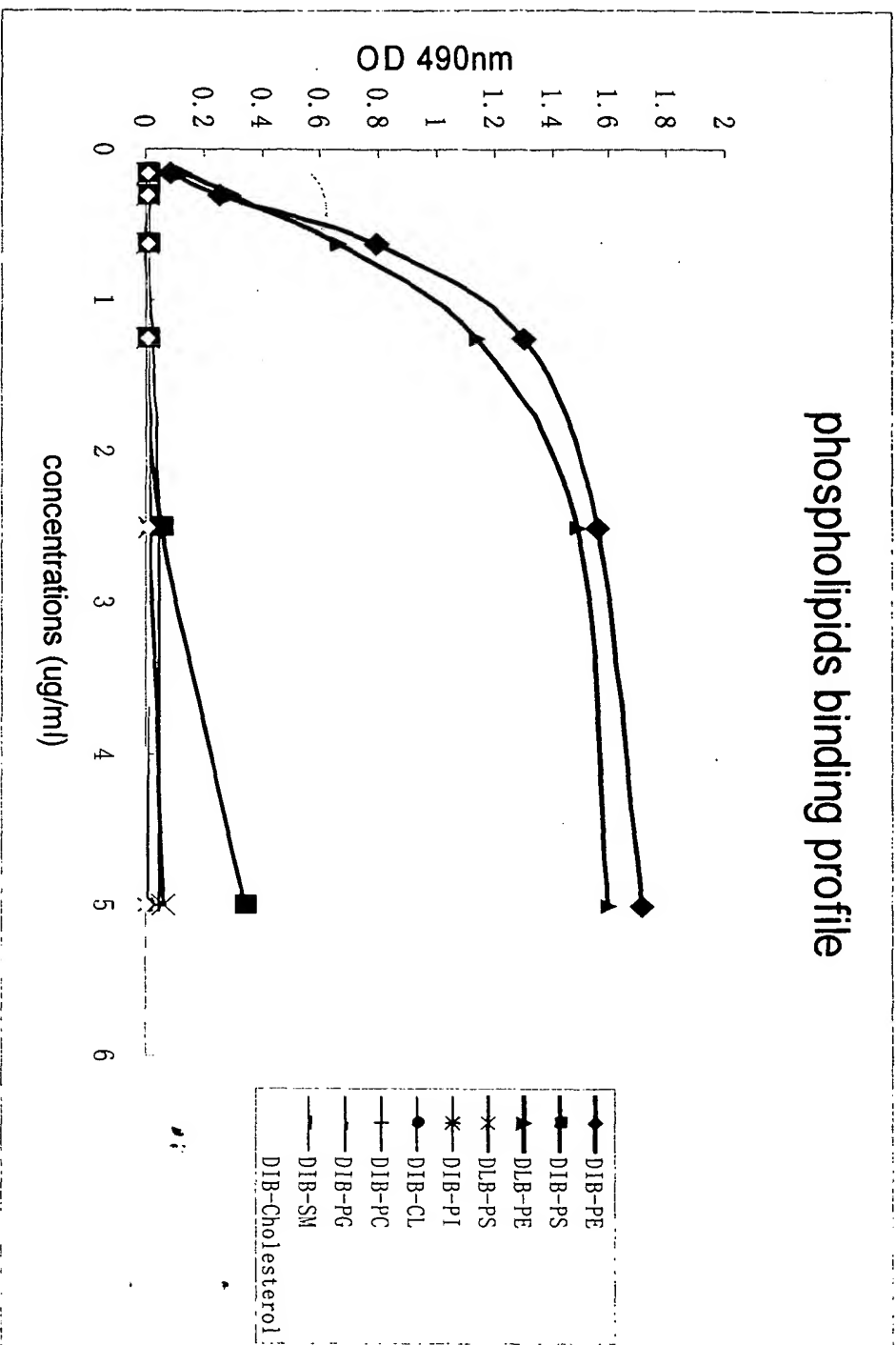


FIG. 14A

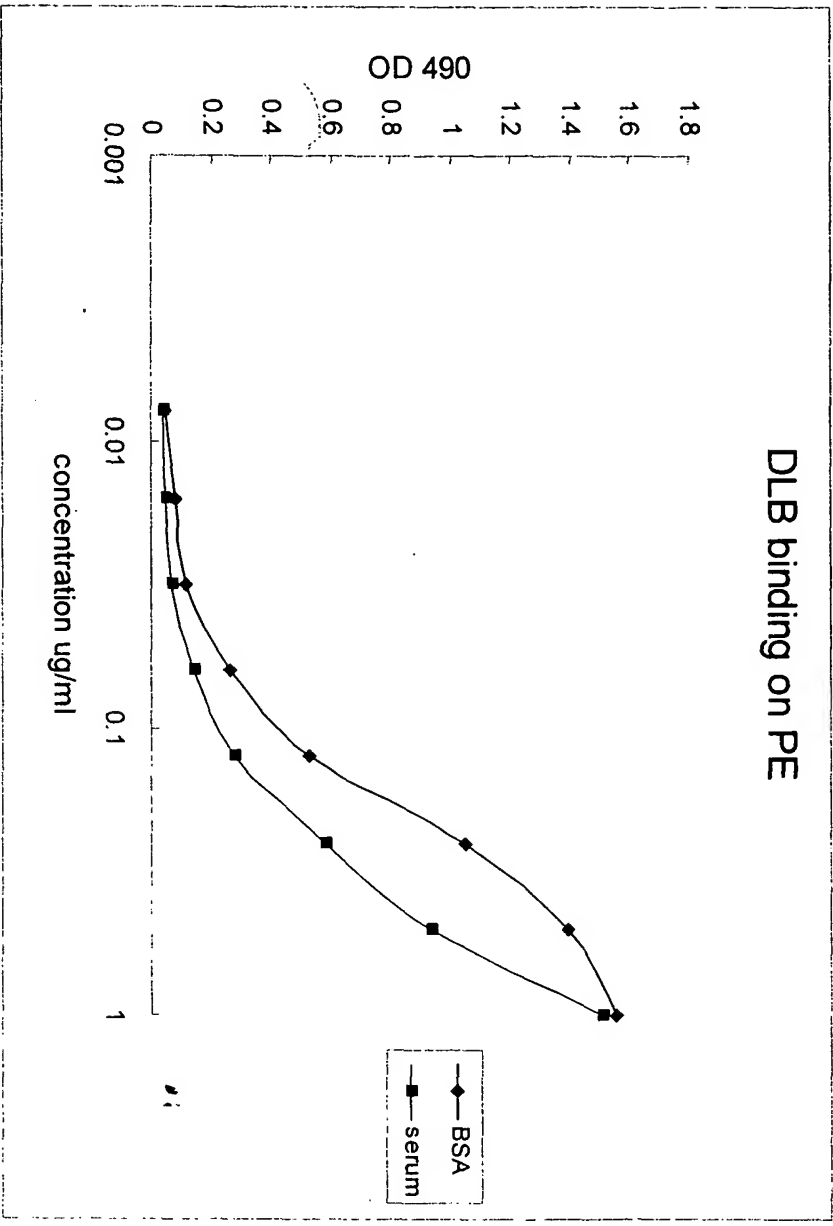


FIG. 14B

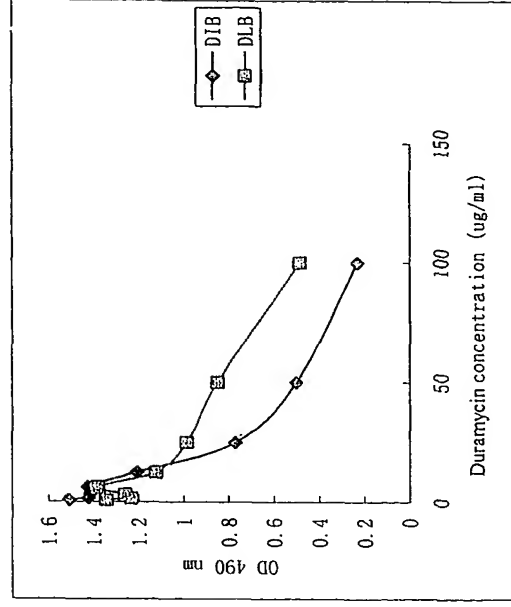


FIG. 14D

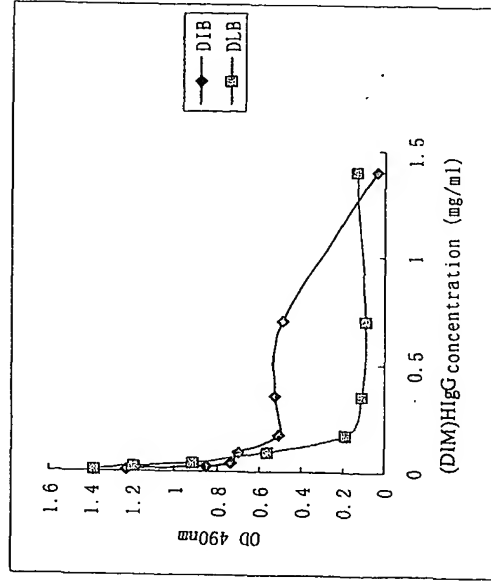


FIG. 14C

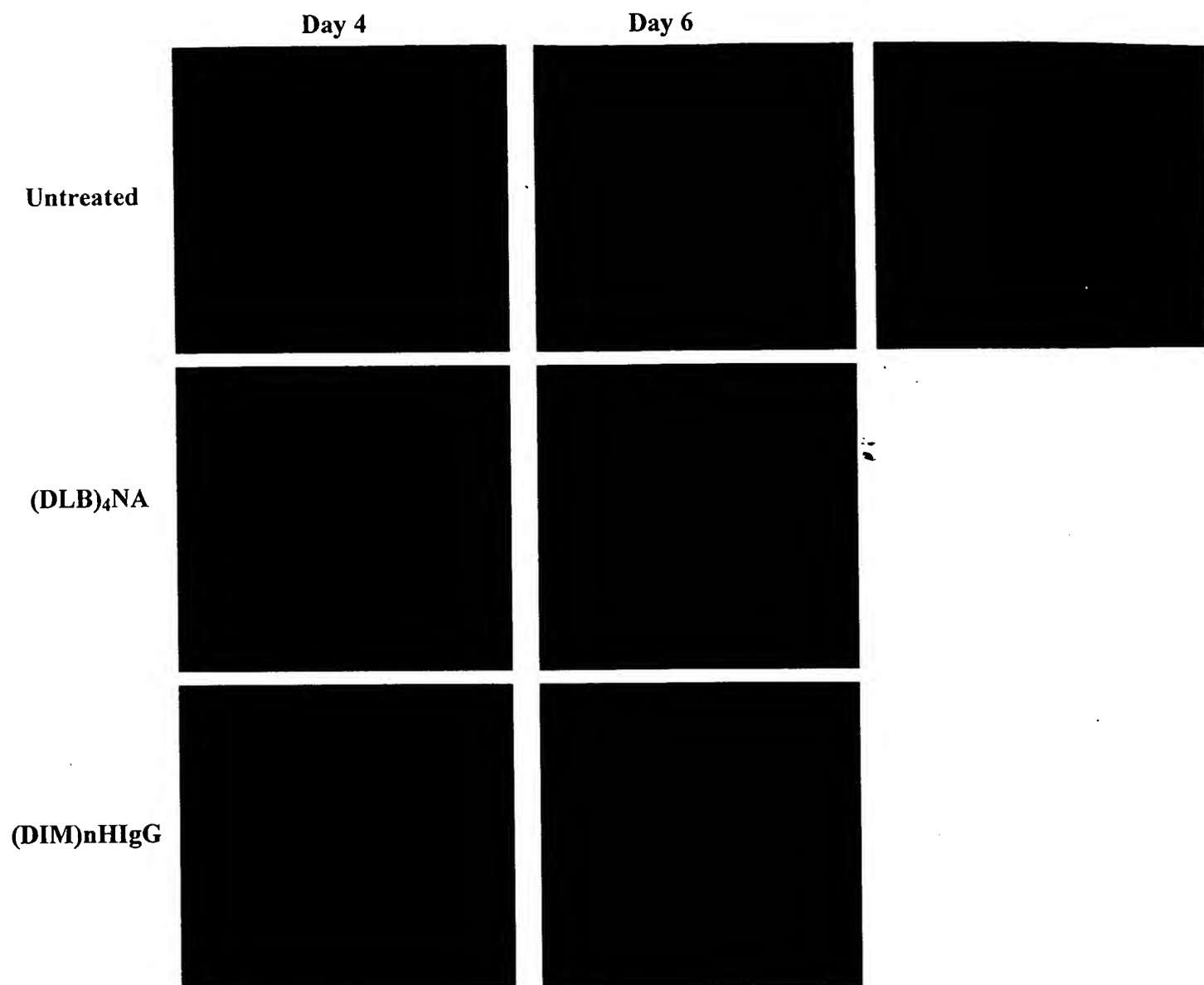


FIG. 15

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SELECTIVE INHIBITION OF DIVIDING ENDOTHELIAL CELLS BY ANTI-PS ANTIBODIES

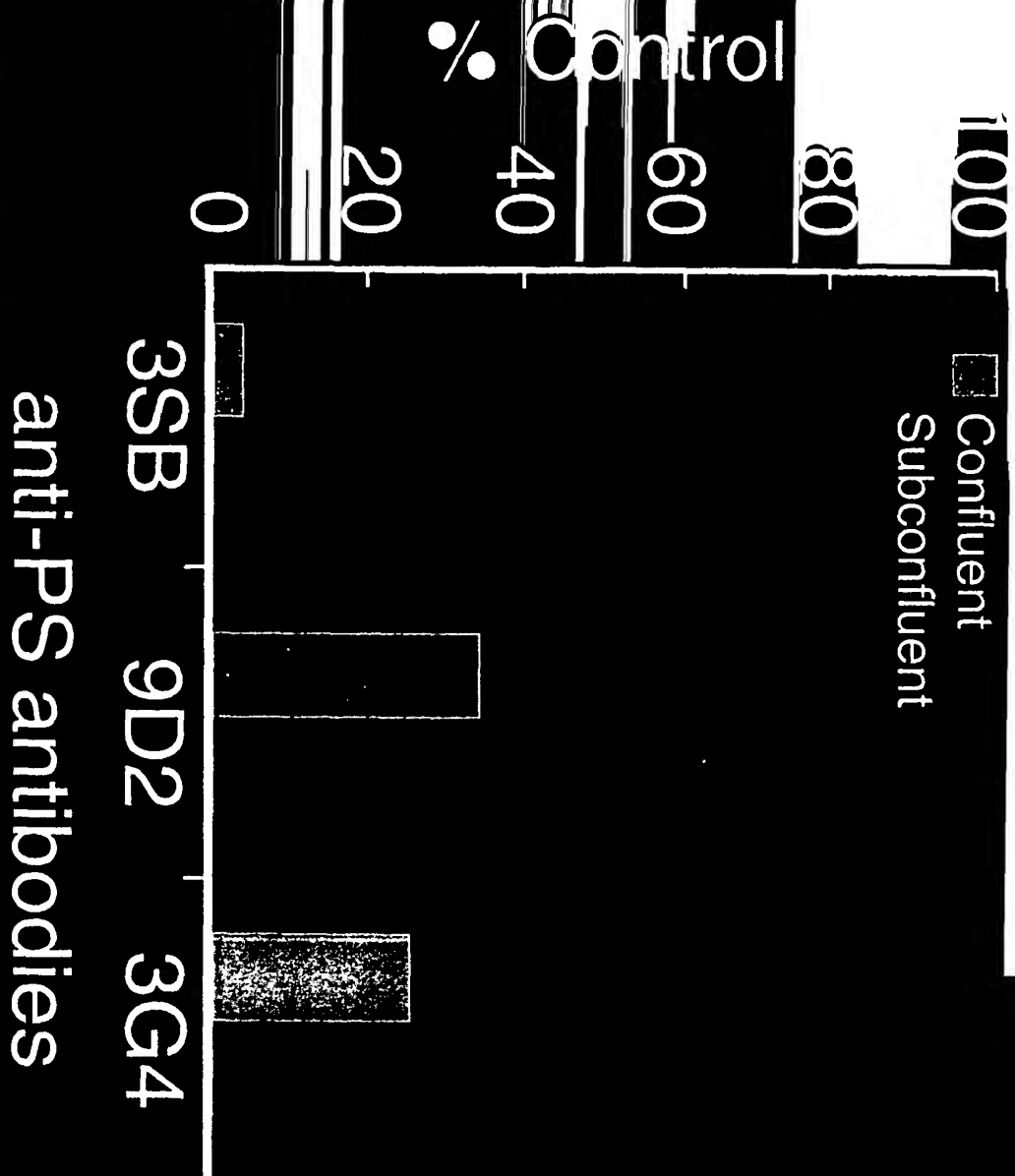
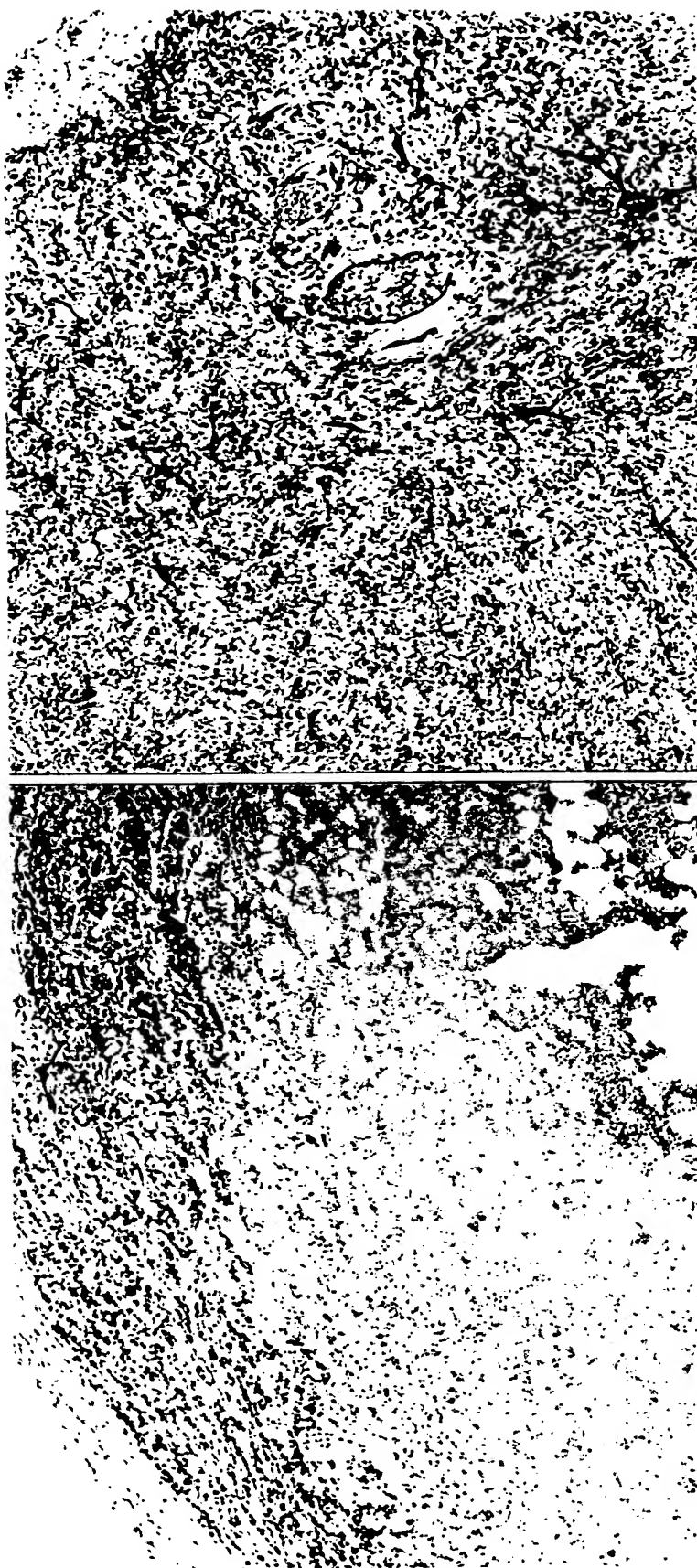


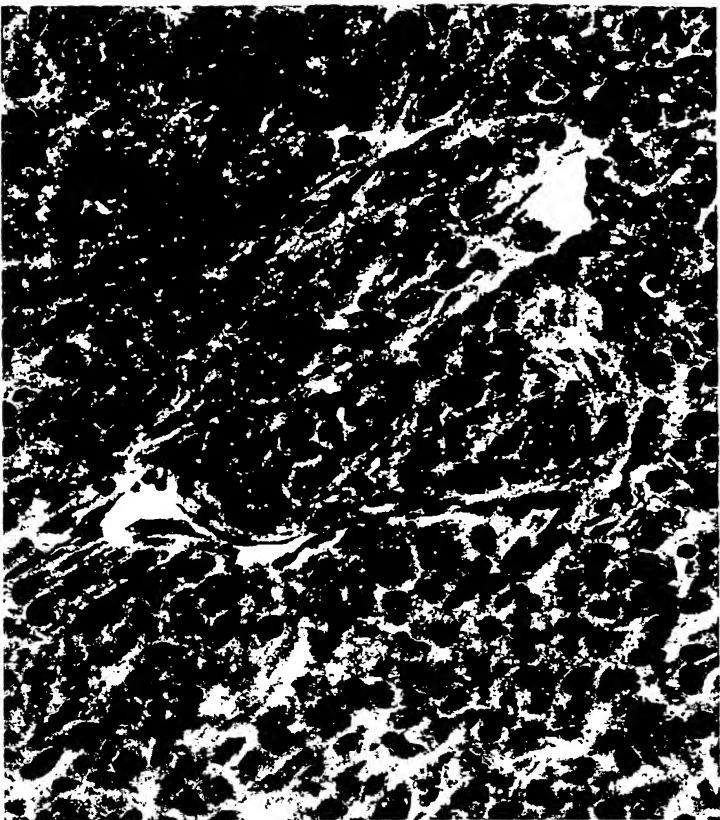
FIG. 16

FIG. 17A



BEST AVAILABLE COPY

Control



Treated

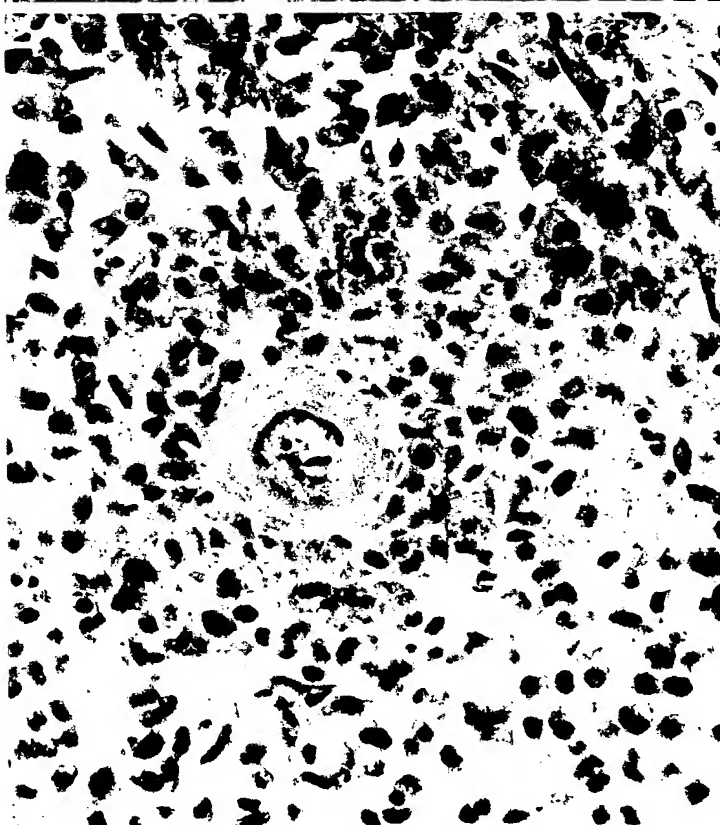


FIG. 17B

BEST AVAILABLE COPY

FIG. 18A

3G4-2BVH original sequence:

[illegible]

The RACE product 3G4-2BVH is cloned and grafted onto the human $\gamma 1$ constant region at the BstEII site. Thus, it contains the mouse leader sequence and its VH is joined with the human CH1 sequence in the following way: leader/3G4VH/VSS-AST...

	Mouse Leader		↓mature protein		
1	MGWTWIFILI	LSVTTGVHSE	VQLQQSGPEL	EKPGASVKLS	CKASGYSFTG
51	YNMNWVKQSH	GKSLEWIGHI	DPYYGDTSYN	QKFRGKATLT	VDKSSSTAYM
				↓BstEII graft site	
101	QLKSLTSEDS	AVYYCVKGGY	YGHWYFDVWG	AGTTVTVSS	ASTKGPSVFPL
151	APSSKSTSG				↑human γ1CH1

FIG. 18B

3G4-2BVL original sequence:

																M	D	M	R	A
61																ATG	GAC	ATG	AGG	GCT
																TAC	CTG	TAC	TCC	CQA
	P	A	Q	I	L	G	F	L	L	L	F	P	G	T		R	C	D	I	Q
121	CCT	GCA	CAG	ATT	ATC	GGC	TTC	TTG	TTG	CTC	TTG	TTT	CCA	GGT	ACC	AGA	TGT	GAC	ATC	CAG
	CGA	CGT	GTC	TAA	AAC	CCG	AAG	AAC	AAC	GAG	AAC	AAA	GGT	CCA	TGG	TCT	ACA	CTG	TAG	GTC
	M	T	Q	S	P	S	S	L	S	A	S	L	G	E	R	V	S	L	T	C
181	ATG	ACC	CAG	TCT	CCA	TCC	AGC	TTA	TCT	GCC	TCT	CTG	GGA	GAA	AGA	GTC	AGT	GAC	ACT	TGT
	TAC	TGG	GTC	AGA	GGT	AGG	AGG	AAT	AGA	CGG	AGA	GAC	CCT	CTT	TTC	CAG	TCA	GAG	TGA	ACA
	R	A	S	Q	D	I	G	S	S	L	N	W	L	Q	Q	G	P	D	G	T
241	CGG	GCA	AGT	CAG	GAC	ATT	GGT	AGT	AGC	TTA	AAC	TGG	CTT	CAG	CAG	GGA	CCA	GAT	GGA	ACT
	GCC	CGT	TCA	GTC	CTG	TAA	CCA	TCA	TCG	AAT	TTG	ACC	GAA	GTC	GTC	CCT	GGT	CTA	CCT	TGA
	I	K	R	L	I	Y	A	T	S	S	L	D	S	G	V	P	K	R	F	S
301	ATT	AAA	CGC	CTG	ATC	TAC	GCC	ACA	TCC	AGT	TTA	GAT	TCT	GGT	GTC	CCC	AAA	AGG	TTC	AGT
	TAA	TTT	GCG	GAC	TAG	ATG	CGG	TGT	AGG	TCA	AAT	CTA	AGA	CCA	CAG	GGG	TTT	TCC	AAG	TCA
	G	S	R	S	G	S	D	Y	S	L	T	I	S	S	L	E	S	E	D	F
361	GGC	AGT	AGG	TCT	GGG	TCA	GAT	TAT	TCT	CTC	ACC	ATC	AGC	AGC	CTT	GAG	TCT	GAA	GAT	TTT
	CCG	TCA	TCC	AGA	CCC	AGT	CTA	ATA	AGA	GAG	TGG	TAG	TCG	TCG	GAA	CTC	AGA	CTT	CTA	AAA
	V	D	Y	Y	C	L	Q	Y	V	S	S	P	F	T	F	G	A	G	T	K
421	GTA	GAC	TAT	TAT	TGT	CTA	CAA	TAT	GTT	AGT	TCT	CCT	CCC	ACG	TTC	GGT	GCT	GGG	ACC	AAG
	CAT	CTG	ATA	ATG	ACA	GAT	GTT	ATA	CAA	TCA	AGA	GGA	GGG	TGC	AAG	CCA	CGA	CCC	TGG	TTC
												BbsI					BamHI			
												-----					-----			
481	L	E	L	K	R	A	D	A	A	P	T	V	F	I	F	G	R	I	P	
	CTG	GAG	CTG	AAA	CGG	GCT	GAT	GCT	GCA	CCA	ACT	GTC	TTC	ATC	TTC	GGG	CGG	ATC	CCC	CGG
	GAC	CTC	GAC	TTT	GCC	CGA	CTA	CGA	CGT	GGT	TGA	CAG	AAG	TAG	AAG	CCC	GCC	TAG	GGG	GCC

The RACE product 3G4-2BVL is grafted to human κ constant region at the BbsI site. Thus, it contains the mouse leader sequence and its VL is joined with the human CL1 sequence in the following way: leader/3G4-VL/TVF-IFP...

	Mouse Leader		↓mature protein		
1	MDMRAPAQIL	GFLLLLFPGT	RCDIQMTQSP	SSLASLGER	VSLTCRASQD
51	IGSSLNWLQQ	GPDGTIKRLI	YATSSLD SGV	PKRFSGSRSG	SDYSLTISSL
			FR4↓		↓BbsI graft site
101	ESEDFVDYYC	LQYVSSPPTF	GAGTKLELKR	ADAAPT VF	IFPPSDEQLKSGTAS
					↑ human kappa constant

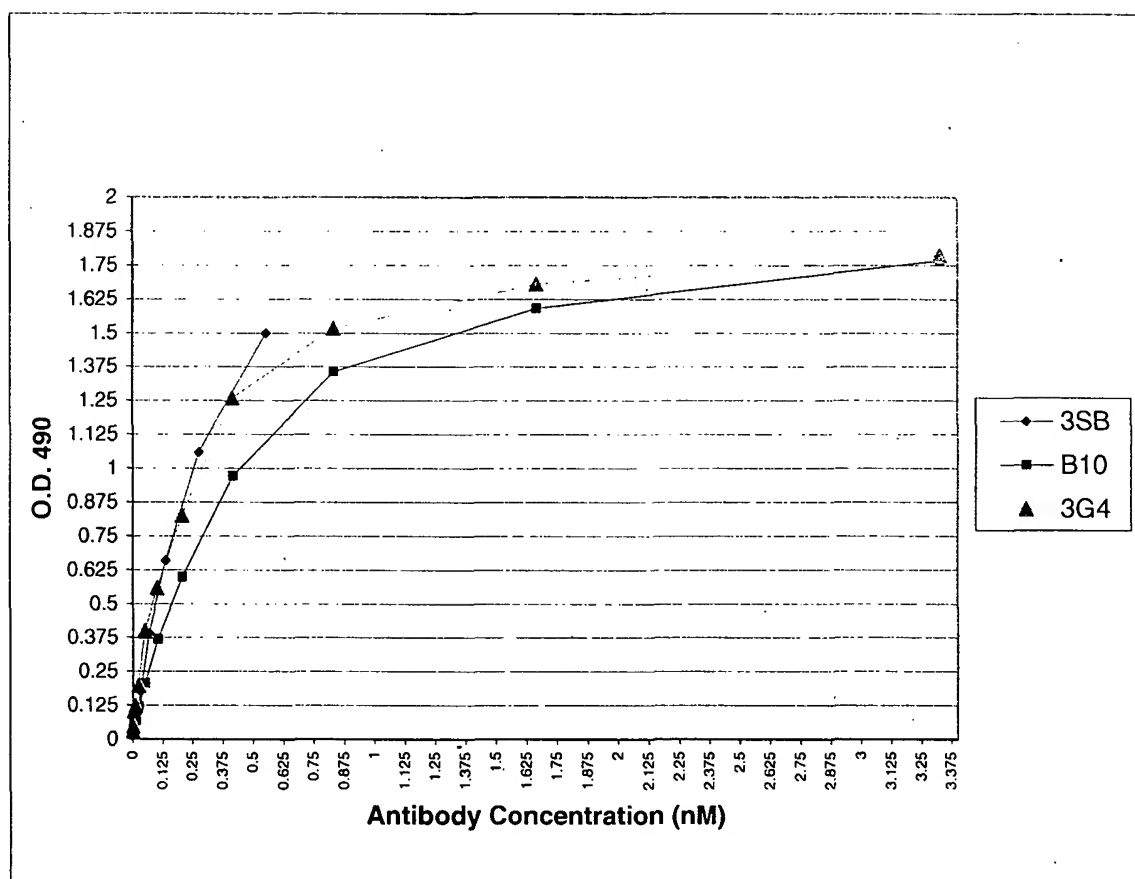


FIG. 19A

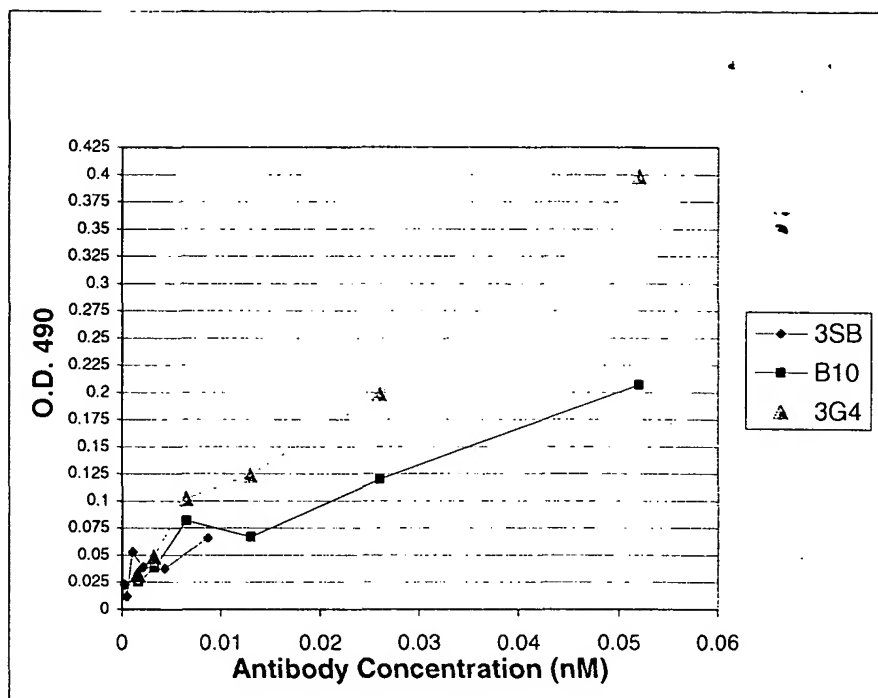


FIG. 19B

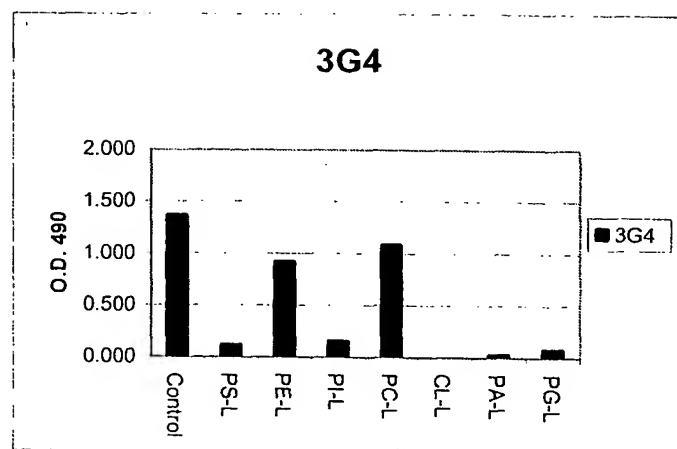


FIG. 20

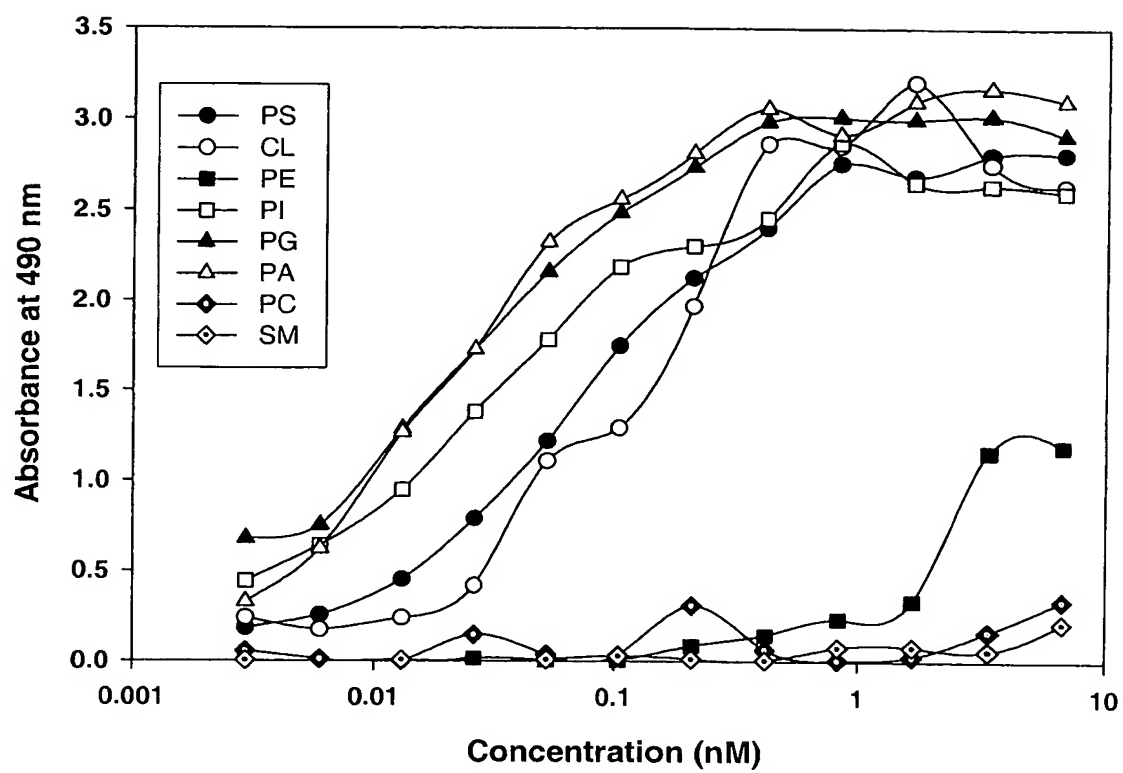


FIG. 21

LOCALIZATION OF ch3G4 TO BLOOD VESSELS IN ORTHOTOPIC MDA-MB-435 TUMORS IN MICE

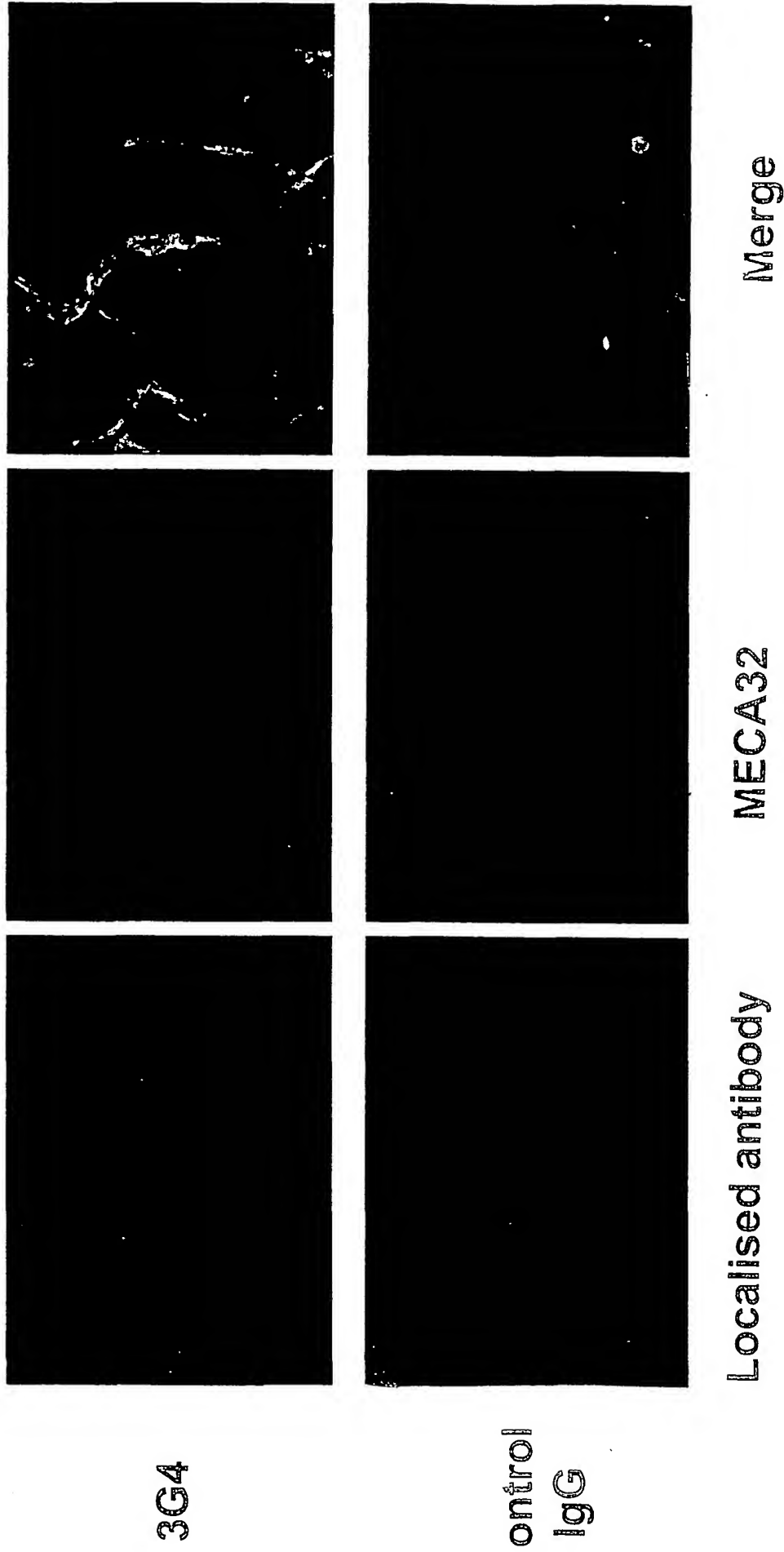


FIG. 22

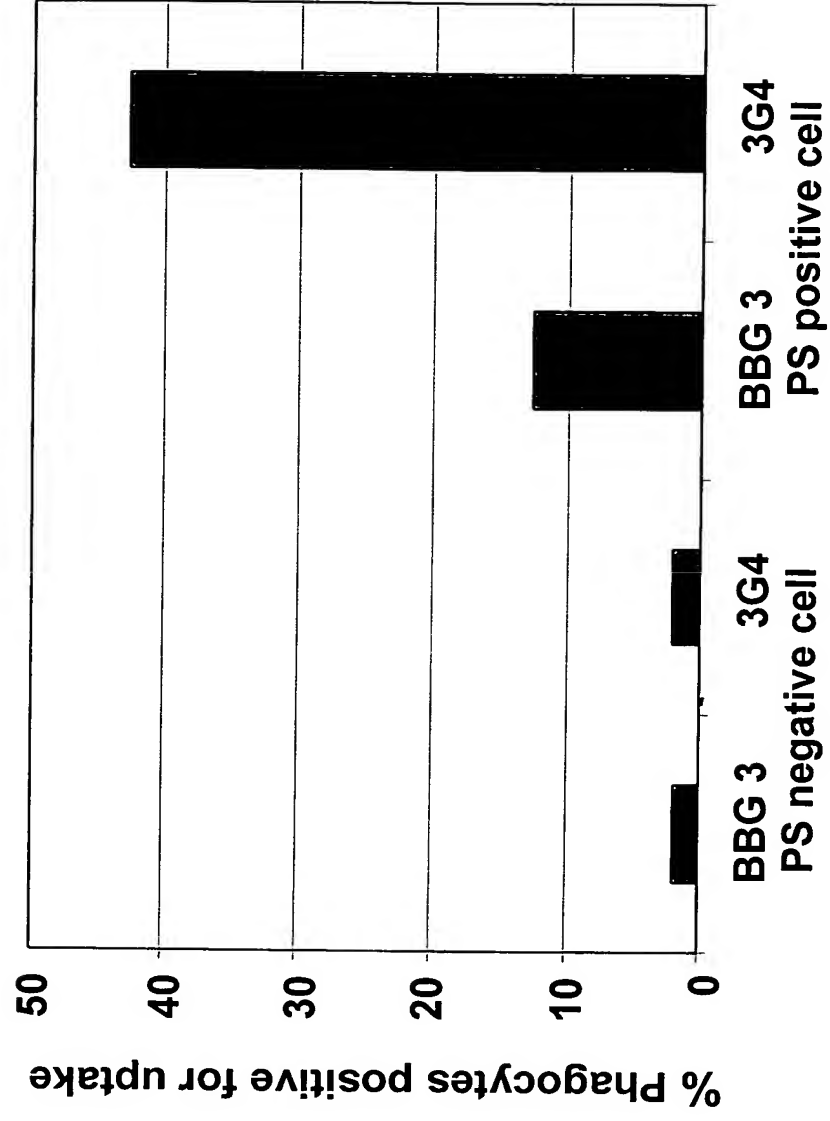


FIG. 23

HUVEC

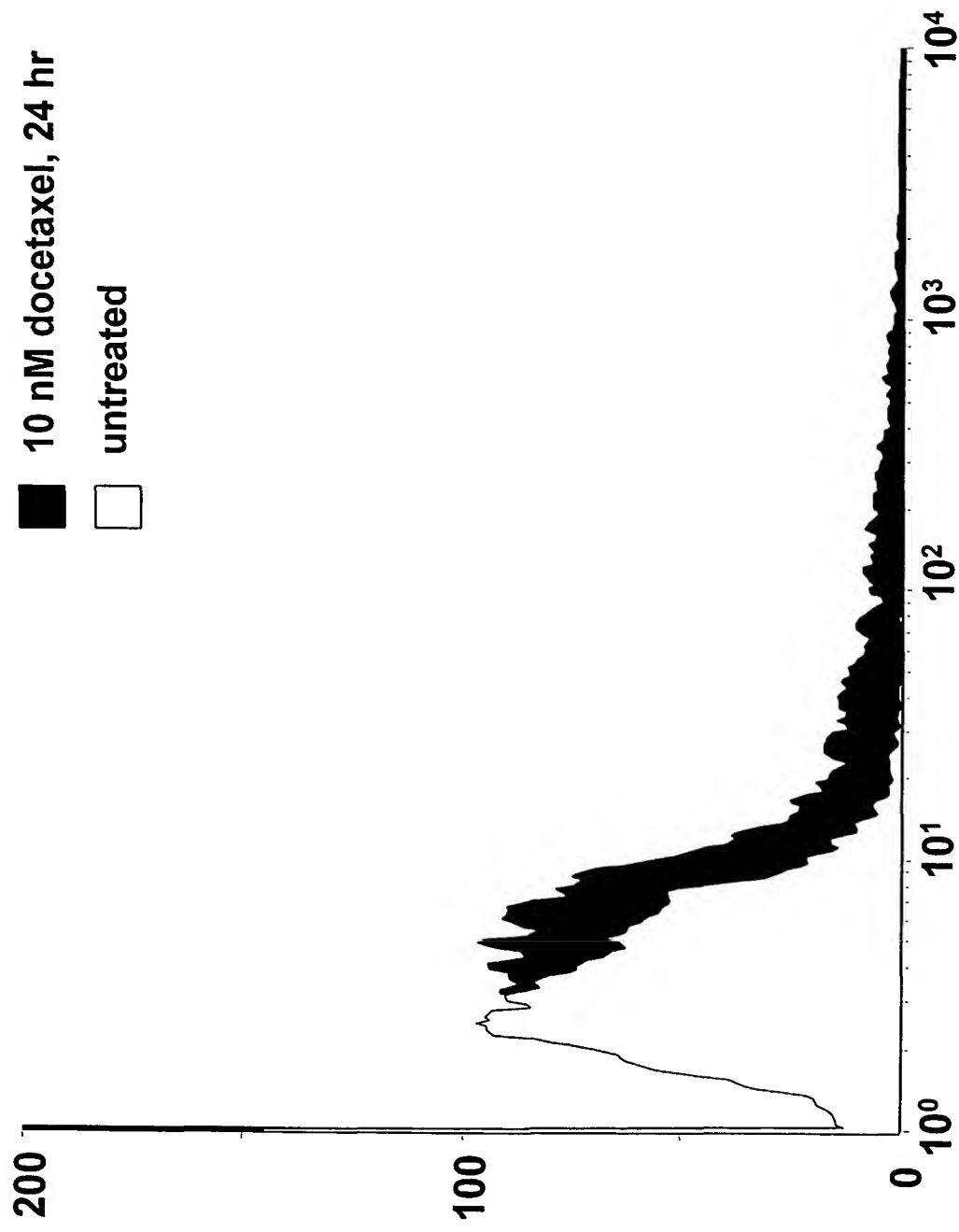


FIG. 24A

HMVEC

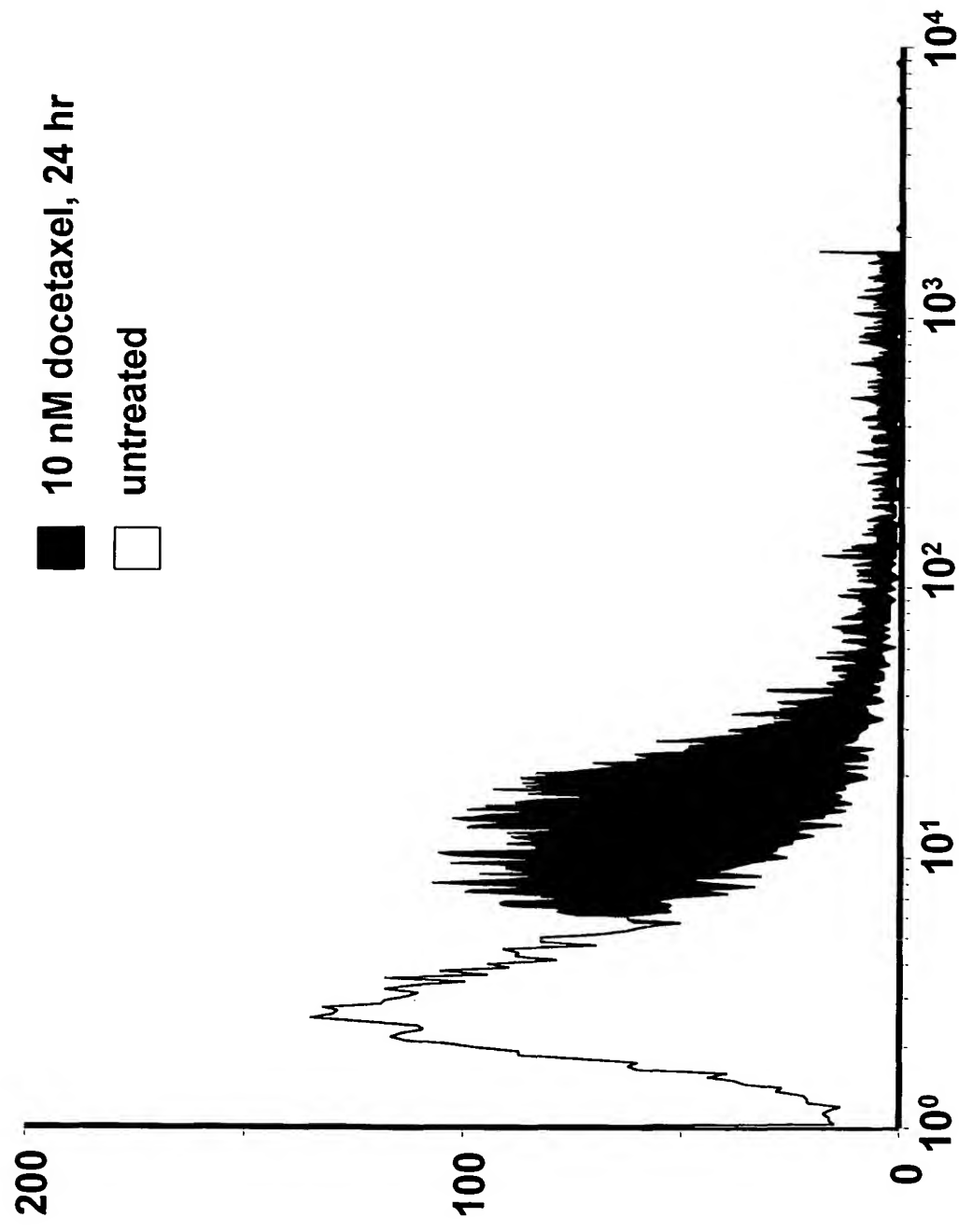


FIG. 24B

3LL

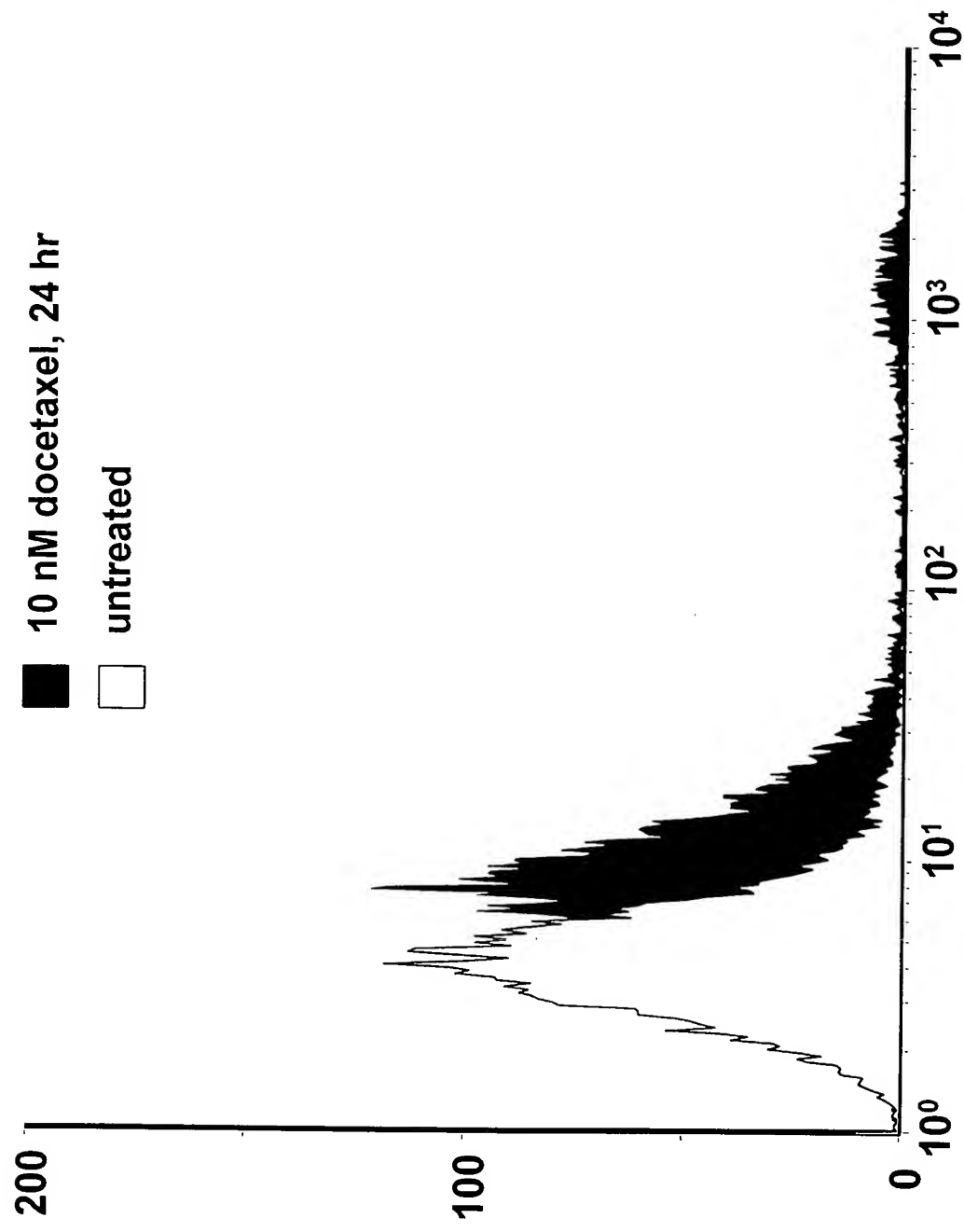


FIG. 25A

colo26

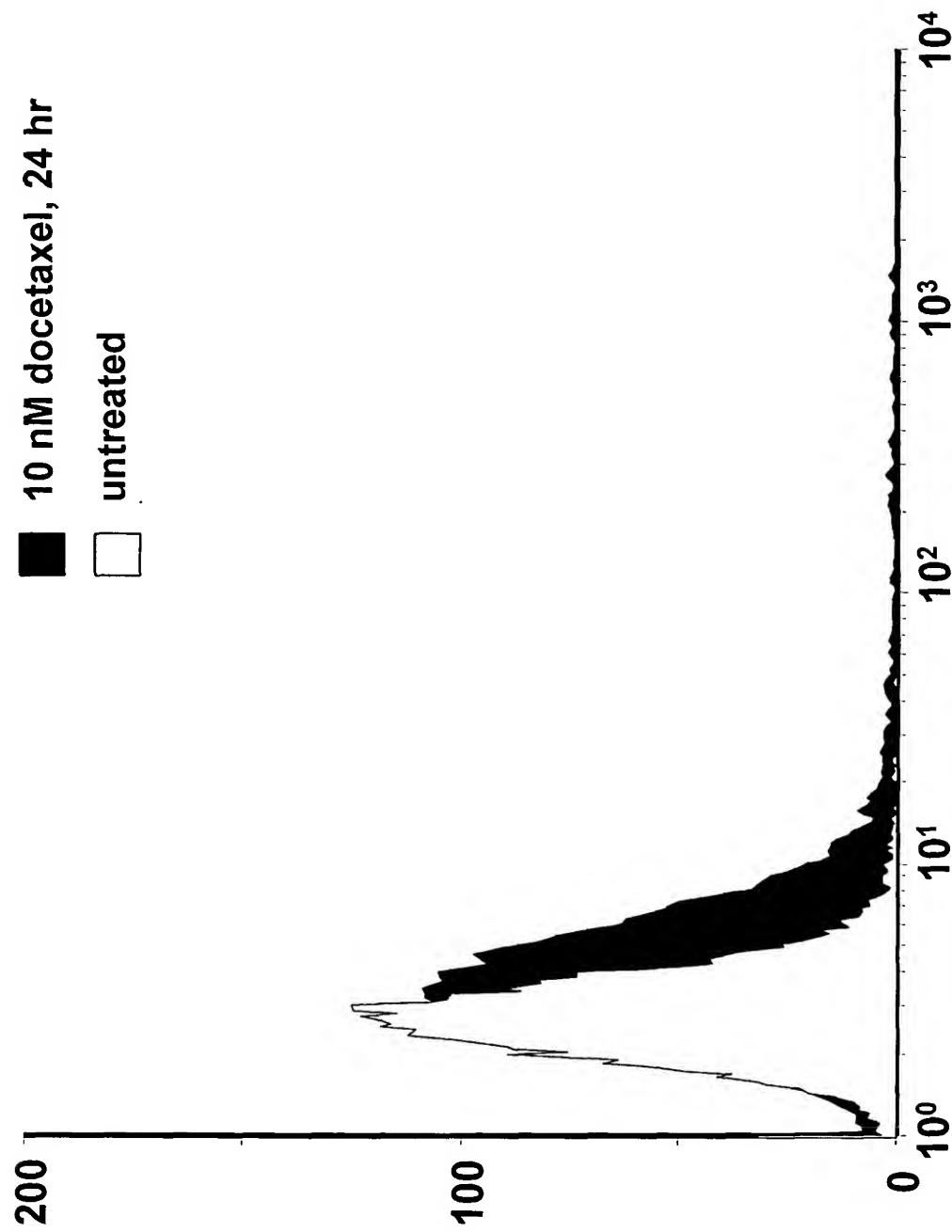


FIG. 25B

435s-luc

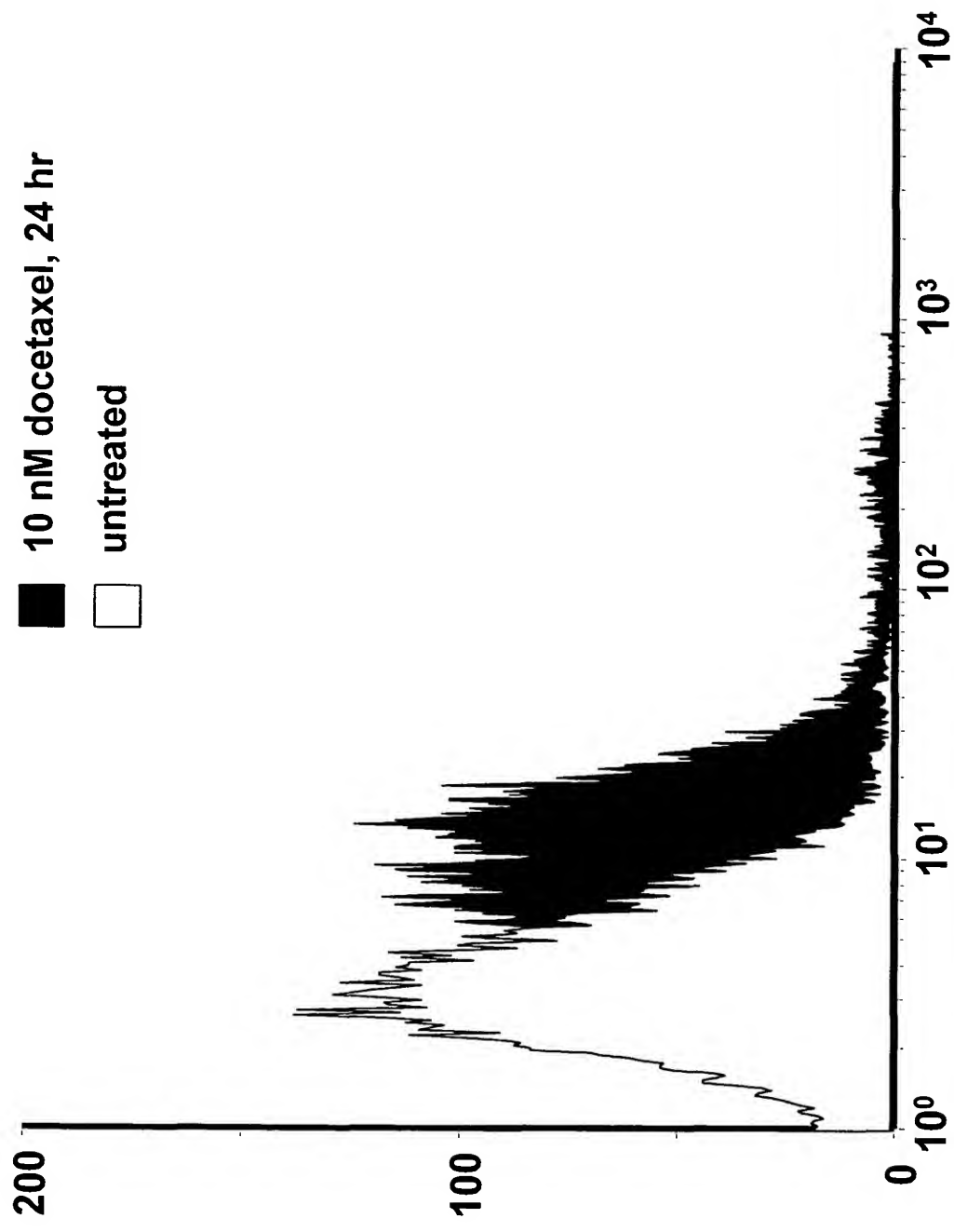


FIG. 25C

Binding of 3G4 to MDA-MB-231 to by FACS

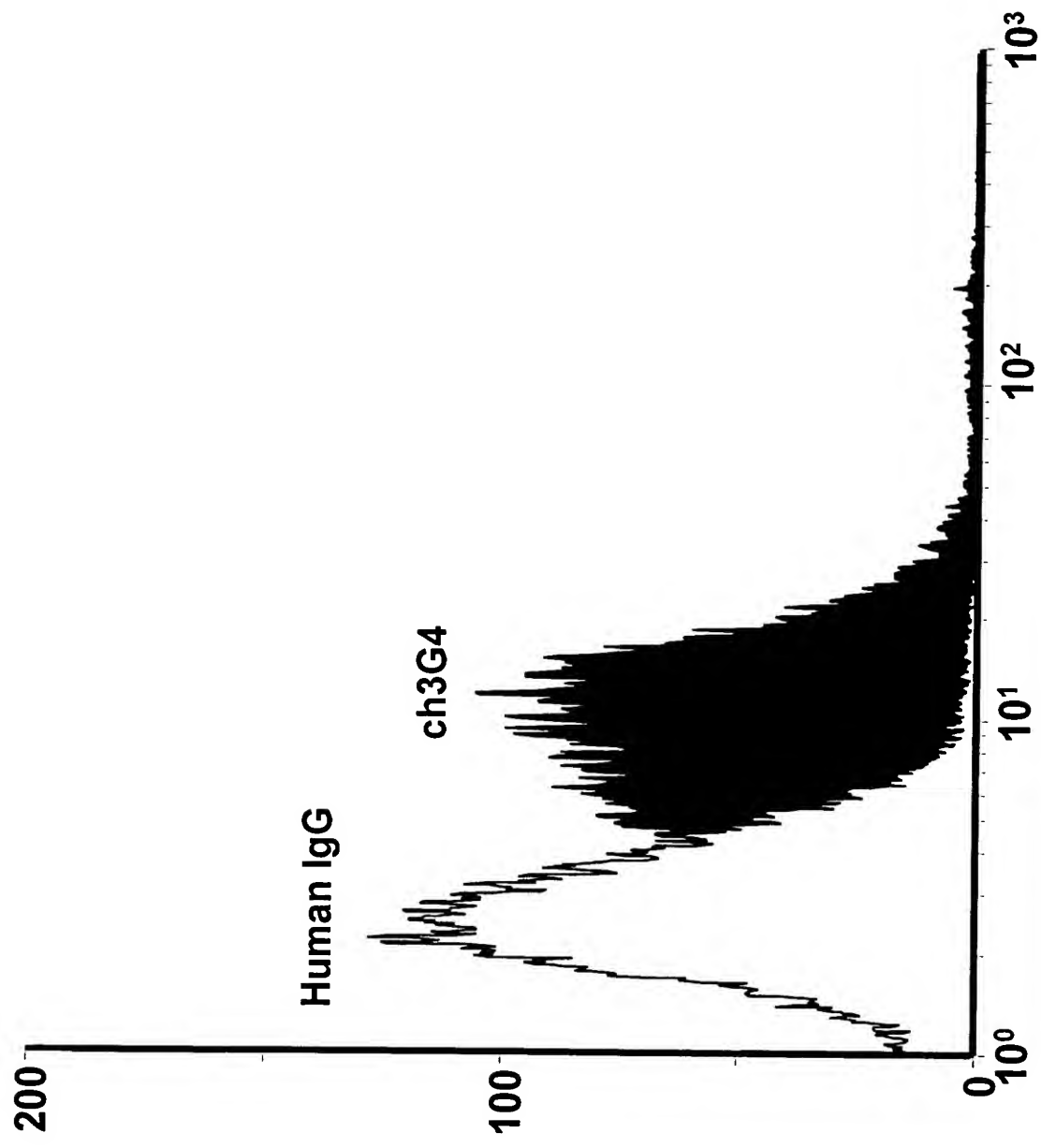


FIG. 26

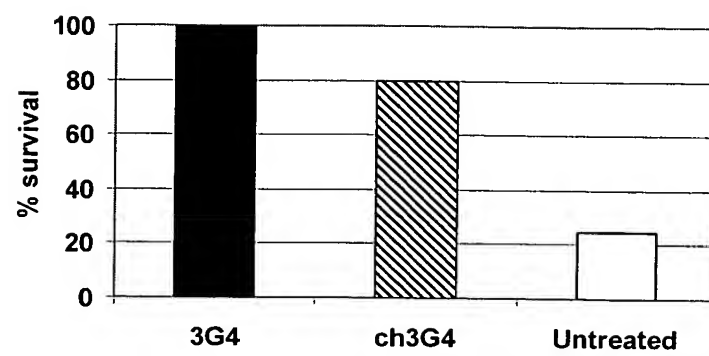


FIG. 27

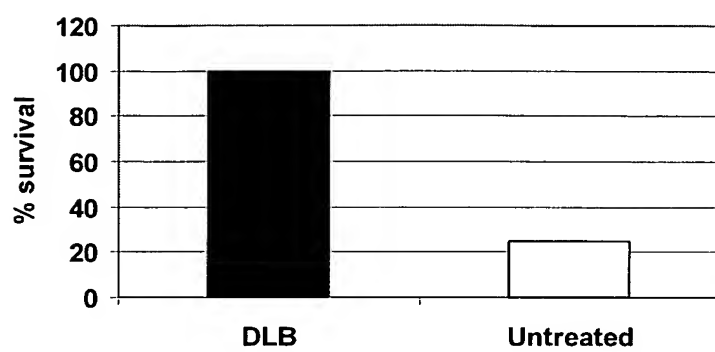


FIG. 28

FIG. 29A

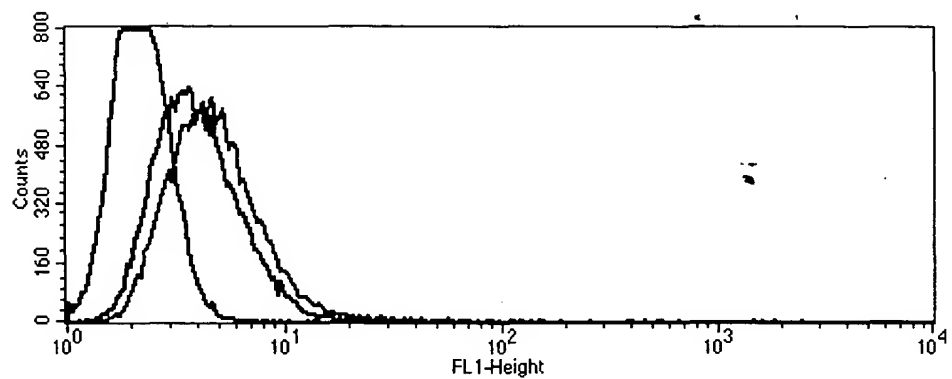
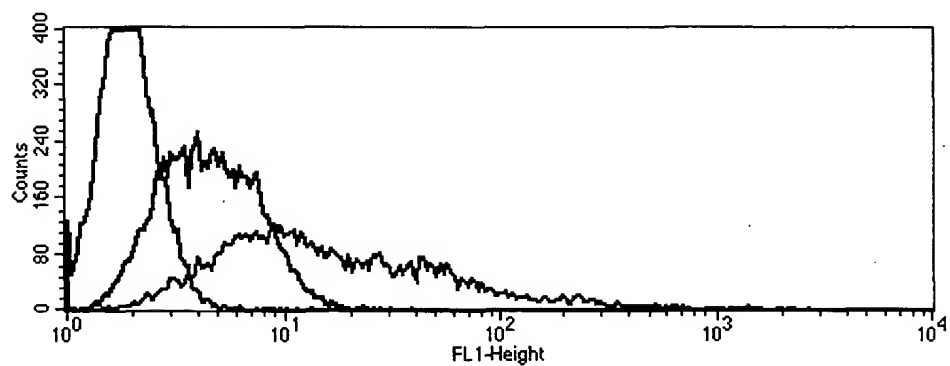
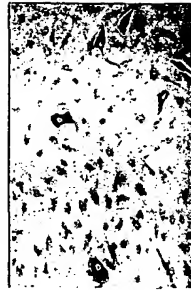


FIG. 29B



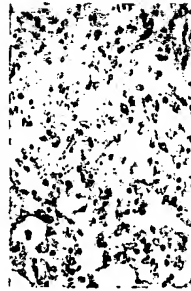
3G4 treated



Stained with anti-PIC

FIG. 30A

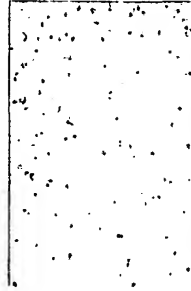
GV39G treated



Stained with anti-PIC

FIG. 30B

GV39G treated



Secondary Ab. only

FIG. 30C

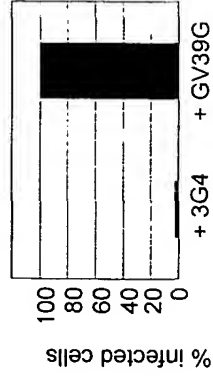


FIG. 30D

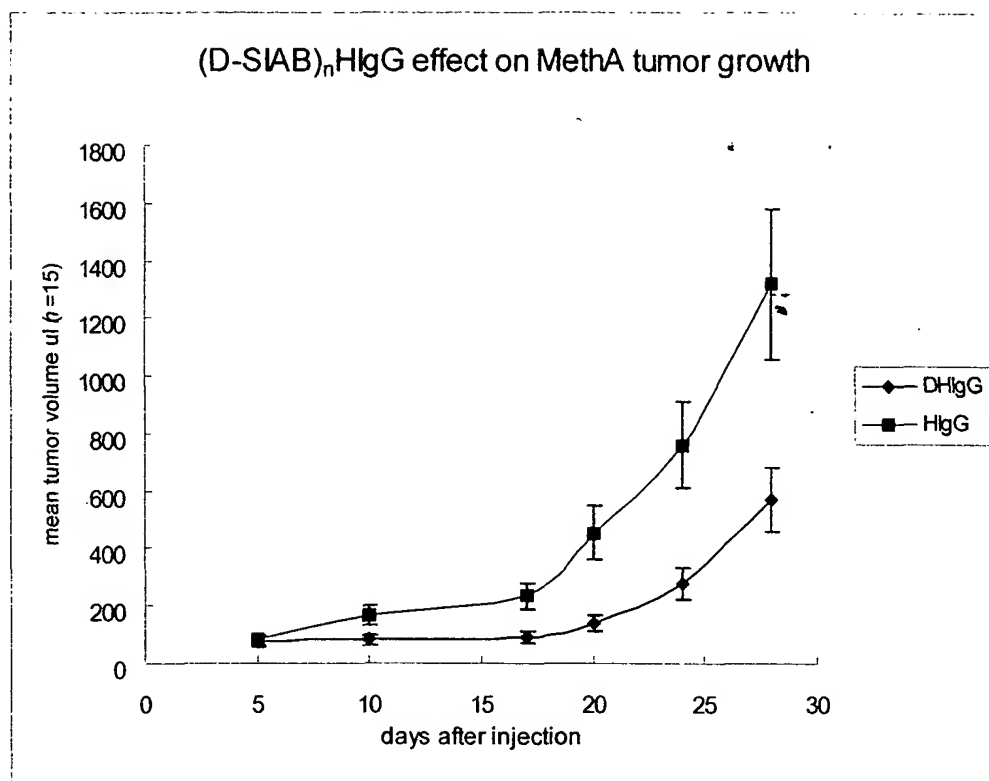


FIG. 31

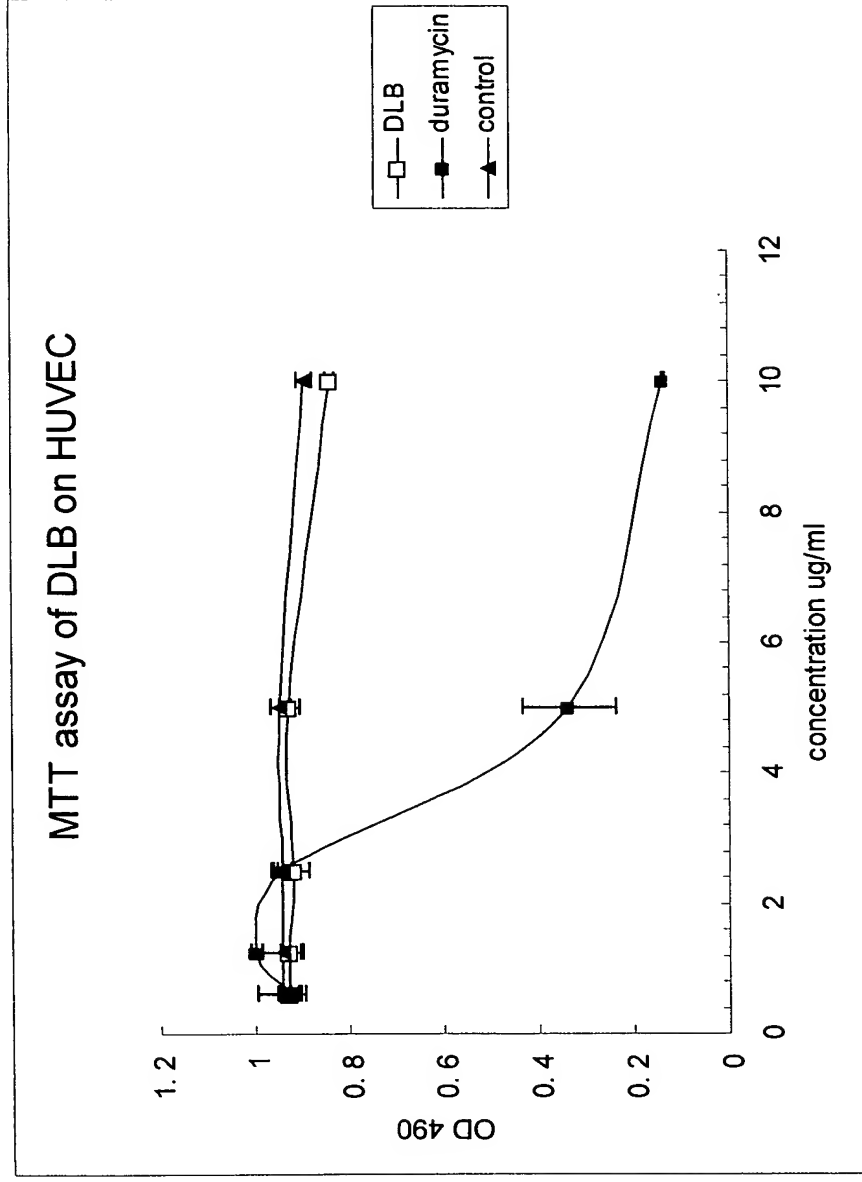


FIG. 32

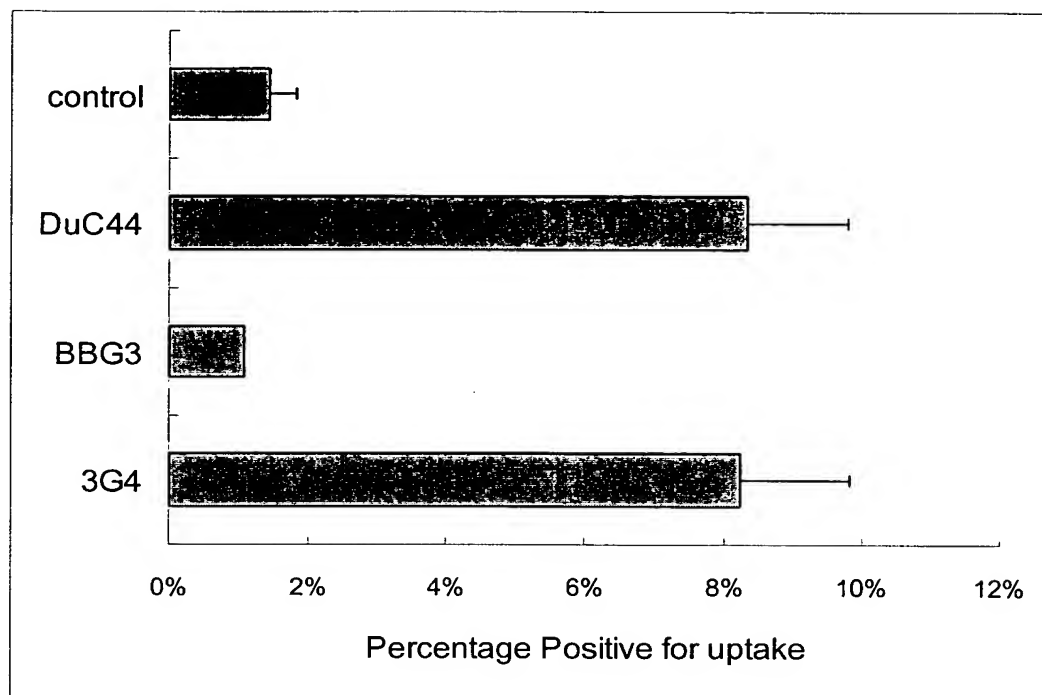


FIG. 33